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THE ROLE OF ENGLISH-FRENCH COGNATES IN LISTENING

AND READING COMPREHENSION IN THE LEARNING OF

FRENCH AS A SECOND LANGUAGE

by

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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled THE ROLE OF ENGLISH-FRENCH COGNATES IN LISTENING AND READING COMPREHENSION IN THE LEARNING OF FRENCH AS A SECOND LANGUAGE submitted by PETRA HAMMER in partial fulfilment of the requirements for the degree of Master of Education.

THIS THESIS IS DEDICATED TO

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ABSTRACT

The aim of this study was to determine whether or not students can employ English-French cognates in listening and reading comprehension of French by being taught the phonemic and spelling alterations influencing English-French cognates. Two approaches were devised, namely 1) phonetic training for the oral recognition of cognates and 2) vocabulary acquisition techniques in the written recognition of cognates. The results were analyzed to discover whether or not English-French cognates could be used as a vocabulary acquisition device in oral and written comprehension of French by Anglophones.

Seventy-four students, comprising three intact grade 10, French 11 classes in an Edmonton, Alberta public school participated in this study. One class served as a control group, one class received training in the phonemic differences of English-French cognates, and one class was taught the spelling alterations of English-French cognates. Three criterion measures were used as pre- and posttests: an English vocabulary test measuring knowledge of meaning of words (Quick-Scoring Vocabulary test or QSVT), an oral cognate recognition word test (OCRT) and a written cognate recognition sentence test (WCRT). The regular classroom teacher administered these tests and taught the cognate material.

Intercorrelations among the QSVT and the cognate tests were calculated in order to determine the relationships among the English vocabulary test (QSVT) and the cognate tests. One way analyses of covariance were carried out on the OCRT and WCRT posttest with the OCRT or WCRT and the QSVT pretests as covariates to determine any statistically significant difference of group means on the cognate posttests for the three groups. The two way analysis of variance was calculated to test for any interaction effect.

The correlations of the QSVT and the cognate tests were statistically significant with one exception. The correlation of the QSVT and WCRT posttest for group B was not statistically significant. Significant main effects were found for the OCRT and WCRT posttests. Teaching students the written recognition of cognates also tends to improve students' oral recognition of cognates. The written cognate recognition group improved statistically significantly on the OCRT posttest. The reverse transfer effect from the oral recognition of cognates to reading recognition and comprehension of cognates was not found. The QSVT was the best single predictor of performance on the OCRT and WCRT pretests. No statistically significant interaction effect among the three groups and the OCRT, WCRT and QSVT pre- and posttests was found. The findings suggest that English-French cognates can be used as a vocabulary acquisition device for the oral and written

comprehension of French by Anglophones.

ACKNOWLEDGEMENTS

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Introduction

Vocabulary may be regarded as one of the cornerstones in the acquisition of a second language. Chamberlin writes that "the study of a foreign language deals first and last with words" (Chamberlin, 1905:315) and Walter Bernard claims that:

> ... practically all forms and the entire structure of the language can be reduced fundamentally to a matter of vocabulary. This holds true even of the so-called purely grammatical forms which can be and indeed very often are learned as vocabulary (Bernard,1951:89).

Mackey further observes that "les éléments du vocabulaire sont, de loin, les éléments les plus nombreux ..." (Mackey, 1972 :134).

The various word-count studies and frequency lists of words are closely related to the general problem of vocabulary and efforts have been directed towards determining a basic vocabulary for the functional teaching of French as a second language (Kist, 1962). The compilation of Le Fran.ais Fondamental, (Premier et deuxième degré) in 1959 is an example. Its aim is "... qu'il fournit des moyens d'expression suffisants, ... en vue de l'acquisition du "français complet." Jean-Guy Savard

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and Jack Richards have compiled a wordlist with "les indices d'utilité du vocabulaire fondamental français" (Savard & Richards, 1970). William Mackey has investigated "le vocabulaire disponible du français" (Mackey, 1971). The purpose of constructing these wordlists was to assess and limit the vocabulary to be acquired by a non-Francophone, because, as Savard writes: "Aucun usager ne possède jamais le vocabulaire entier de sa langue" (Savard, 1970 :1) and so much less a learner of a second language.

The time limit allowed in schools for teaching French as a second language necessitates the selection of vocabulary items and grammatical structures to be taught. To make the best possible use of the time available, current teaching methods emphasize the learning of sentence structure. According to Chomsky the person who has acquired knowledge of a language has internalized a system of rules that relate sound and meaning in a particular way (Chomsky,1968 : 115). However, in the actual teaching-learning situation, second language teachers come to realize that "vocabulary teaching has been neglected" (Holley, 1973 : 339). Robert Gagné writes: "From the standpoint of learning efficiency there would seem to be little merit whatsoever in the attempt to teach structure before vocabulary" (Gagné, 1967 : 195) and Robert Hartwig claims that "... no method widely practiced today gives serious attention to the systematic teaching of the lexical core of the language" (Hartwig, 1974 : 720). Cor says that

"the concentration on structure underplays the lexical meanings of words" (Cor, 1967 : 819). Summarizing the observations made by these various writers, it can be said that concentrating on sentence structures may leave the student with potentially productive sentence patterns but without the vocabulary necessary to produce meaningful utterances. The student is "at loss for words" (Hartwig, 1974; Rivers, 1973; Cor, 1967; Gagné, 1967). The discrepancy between the student's maturity level and his ability to understand and/or say what he wishes in the second language could be a constant source of frustration and dissatisfaction for the language student if vocabulary teaching remains neglected.

The author of the present study learned the English and French languages simultaneously. She observed that these two languages share an extensive vocabulary which is due to 1) the use of Latin and Greek loanwords in the form of radicals, prefixes, and suffixes in the English and French languages, 2) the Norman conquest, which enriched the English language with many French words and 3) lexical borrowings from other languages. Uriel Weinreich sees a considerable body of common culture in Europe reflected in a large corpus of common vocabulary (Weinreich,1953:57). Wilkins notes :

> In the commonly taught languages of Europe and
> America, objective reality is not chopped up by
> language in radically different ways. The languages
> and cultures derive from common sources and have
> remained in close contact with one another. Whether we

live in Rio, Chicago, London, Belgrade or Paris, we are surrounded by the same kind of things and spend our time engaged in the same sort of activities. Where our vocabulary refers to this concrete world, we can expect fairly consistent similarities (Wilkins, 1972 : 121).

Second language vocabulary acquisition may tax the memory of any learner to the utmost. Chamberlin points out that: "The faculty of learning a foreign language depends mainly on the ability to see resemblances, and thus to classify readily the new and strange materials" (Chamberlin, 1905 : 315). Therefore cognates which are words having the same or similar spellings and meanings in two or more languages may prove helpful to the learner.

The investigator made a detailed lexical comparison of English and French cognates with regard to "... form, meaning, and distribution " (Lado,1960:3) and compiled a wordlist of about 11,000 English-French cognates. She worked systematically through the Larousse Dictionnaire Moderne Français -Anglais (1960) printed in Montréal, Canada, and extracted all words with the same or similar spelling and meaning. Deceptive cognates, or words which have the same or similar spelling but different meanings in two or more languages, are marked in the Larousse dictionary, but in order to ensure that no deceptive cognate is contained in the list, Les Faux Amis (1946) by Koessler and Derocquigny and Seward's Dictionary of French Deceptive Cognates (1947) have been compared with the wordlist. All cognates in the Larousse Dictionary have been

listed. No definition of words is given because they can be found in the respective English or French dictionaries. However, for partial cognates, or those cognates whose meanings overlap in some senses but not in others, it is indicated in which domain the English and French words coincide, e.g. in music, philosophy, medicine, art, etc. No phonetic transcription is included.

The relationship of the English and French cognates on the author's list has been set up on a one to one basis e.g. "train" (English, railway) is a cognate with "train" (French, chemin de fer). However common words may have more than one meaning which depends upon the context, and not all meanings coincide for a partial cognate shared by the two languages. The dictionary quite often lists three, four or more French words for one English word. Lovell found that 43% of the basic common words in Funk and Wagnall's dictionary have multiple meanings ranging from two to forty-one in number (Lovell, 1941 : 68). However, as the author's wordlist of English-French cognates stands, the overlap of meaning on a one to one basis warrants its use for teaching.

When classifying cognates, not only cognates and partial cognates, but the deceptive cognates as well must be considered. Seward compiled a dictionary of English-French deceptive cognates and lists about 950 of them. He states however, that "... the deceptive cases are probably

under ten per cent of the number of "good cognates" (Seward, 1947 : 7). It should be noted that the author's wordlist of about 11,000 English-French cognates supports Seward's statement. The fact that there are so many "good" cognates justifies a vocabulary teaching strategy using cognates.

The lexical comparison of cognates fits into the theoretical framework of contrastive linguistics. To the extent that contrastive linguistics is successful in describing and explaining possible facilitation and/or interference effects between two languages it can serve as "... an important tool in language pedagogy "(Gumperz, 1967 : 50) and has a legitimate place in applied linguistics.

Need for the Study

The selection of vocabulary in a second language program depends on the following factors: the contextual areas which are our concern, the grammatical patterns which are to be included within the range of our sample, the age group for which our vocabulary is intended, and which basic language skill, namely, speaking, listening, reading, or writing, is to be applied. The Tentative Curriculum Guide for French (1974) for the Province of Alberta proposes that vocabulary acquisition for level one include:

Level One (One Year)   Passive -   900 words
     e.g. French 10   Active -   300 words

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Level One (Two Years)     Passive - 1,000 words
e.g. French 8 - 9         Active  -   400 words
Level One (Three Years)   Passive - 1,200 words
e.g. French 7 - 8 - 9     Active  -   500 words
(Tentative Curriculum Guide 1974 :21)
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For level two, equated with French 20 and 30 courses or French 11 and 21 "... the following numbers of vocabulary items are suggested in addition to words acquired at level one:

Passive   2,000 - 2,500 words

Active   1,000 - 1,500 words

(Tentative Curriculum Guide 1974 : 34)

Level three, equated with the successful completion of the French 31 course, has no specification in terms of lexical items to be acquired. With the relatively small number of lexical items proposed by the Tentative Curriculum Guide, students may not perceive nor generalize rules concerning vocabulary. For example, from such a limited vocabulary students cannot know nor guess that the English and French languages share approximately 11,000 cognates. Marjorie Johnston writes:

> In practice, the student's association of related words is too often taken for granted, either by omission of systematic word study or by overestimation of the student's linguistic interest. ... Cognates which are obvious to the writers of textbooks and to teachers are not always recognized by students (Johnston, 1939 : 146).

Macnamara (1967) has designed the following "Matrix of Four Aspects of Each of the Four Major Language Skills"

<u>Encoding</u>   <u>Decoding</u>

I <u>Speaking</u>   II <u>Writing</u>   III <u>Listening</u>   IV <u>Reading</u>

1 semantics	semantics	semantics	semantics
2 syntax	syntax	syntax	syntax
3 lexicon	lexicon	lexicon	lexicon
4 phonemes	graphemes	phonemes	graphemes

Vocabulary permeates all four language skills : speaking, writing, listening and reading. Cognates share the semantic, lexical and graphemic realms in the two languages. Thus, a study is needed to establish to what extent English-French cognates are recognized, and once recognized, given a set of phonetic and spelling rules, to what extent they can be utilized in listening and reading, by English speaking students who learn French as a second language.

Purpose of the Study

The purpose of this study was to find out whether pupils are able to utilize English-French cognates in listening and reading comprehension of French as a consequence of being taught the phonemic differences influencing cognates and the spelling alterations of English-French cognates.

Statement of the Problem

Can the study of English-French cognates enhance

listening and reading comprehension of French?

Specifically answers will be sought to the following questions:

1. Is there any relationship between English vocabulary power as measured with the Quick-Scoring Vocabulary Test and the ability to recognize cognates in an oral and/or a written setting?

2. To what extent do students recognize cognate words in an oral presentation?

3. Does phonetic training help students to recognize cognate words orally presented?

4. To what extent do students recognize cognates in their written form?

5. Does training the students to recognize cognates in their written form augment their understanding of unknown sentences?

Definition of Terms

Cognates

Cognates are words in two or more languages that are similar or identical in form and meaning, disregarding accent marks. Loanwords, or words which have been adopted by one language from another, will be called cognates if

they are similar in form and meaning. For example, English and French both adopted the word "malaria" from the Italian language. If two words have the same origin but are now so different that speakers of the two languages do not identify them as similar, they will not be considered cognates for our purposes. For example, the English word "fish" and the French word "poisson" are both derived from the Latin word "piscis". They are cognates in the sense that they both share the Latin origin. However, "fish" and "poisson" are now so different in form that speakers of the two languages may not readily identify them as cognates. The term similar is restricted here to include items that would function as "same" in both languages in ordinary use (Lado, 1960 : 80). Similar in form refers either to a change of one letter in the spelling of the French and English word, for example, oncle – uncle, avantage – advantage, or to the following regularities amongst others if the spelling of the English and French words are otherwise the same :

1. French –té   = English –ty
   nécessité   necessity
   qualité   quality

2. French –ie   = English – y
   comédie   comedy
   industrie   industry

3. French –tie   = English –cy

démocratie	democracy
diplomatie	diplomacy

4. French -nce   = English -ncy

    tendance   tendency

5. French -iste   = English -ist

    journaliste   journalist

    artiste   artist

6. French -et   = English -ect

    effet   effect

    objet   object

7. French - (^)   = English - omitted s

    forêt   forest

    hôpital   hospital

8. French -aire   = English -ary

    anniversaire   anniversary

    militaire   military

9. French es   = English -initial s-

    estomac   stomach

    espace   space

10. French -ès   = English -ess

    progrès   progress

    succès   success

11. French -eur   = English -or (or) -er

    acteur   actor

    docteur   doctor

    employeur   employer

12. French -oire   = English -ory

	gloire	glory
	histoire	history
13.	French -isme	= English -ism
	communisme	communism
14.	French -cien	= English -cian
	électricien	electrician
15.	French -re	= English -er
	mètre	meter
	centre	center
16.	French -er	= English -drop er or r
	commander	command
	commencer	commence
17.	French -ier	= English -y
	varier	vary
18.	French é	= English -initial s
	étrange	strange
19.	French -ique	= English -ic
	classique	classic
	domestique	domestic
20.	French -tif, ive	= English -ive
	collectif	collective
21.	French -eux, euse	= English -ous
	curieux	curious
22.	French -tiel, elle	= English -tial
	confidentiel	confidential
23.	French -é	= English -ed
	disposé	disposed

sacré	sacred

24. French -ment   = English -ly

    naturellement   naturally

    certainement   certainly

Partial cognates

Partial cognates are words which have multiple meanings with some overlap. Some "word pairs coincide in a few meanings, vary in many (or) -- some coincide in many and vary in few" (Anthony, 1952-53:80). For example, "cascade" refers to a water-fall in English and French, but in French it can also have the meanings of " a freakish prank, a spree, an actor's ad-lib wisecrack."

Deceptive Cognates

Deceptive cognates are words which are similar or identical in form in English and French but have a different meaning in the two languages. The term deceptive cognates does not refer exclusively to the origin of words as different meanings may be observed in words sharing their origin or having similar spelling. For example, the word "decade" in English and French share the same Latin origin "decas,-adis", however in French the main meaning refers to ten days and in English to ten years. "Pain" meaning "bread" in French is derived from the Latin word "panis" whereas the English word "pain" developed from the

Latin "poena" meaning penalty, punishment, torment, pain.

Most Frequent Deceptive Cognates

The most frequent deceptive cognates are defined as those deceptive cognates listed in Seward's *Dictionary of French-English Deceptive Cognates* which are contained in *Le Français Fondamental, Premier Degré.*

Interference

Interference is the use of elements of one language while speaking or writing the other" (Mackey, 1965 : 239).

Anglophone

In this study an Anglophone is an individual whose dominant language is English.

Phonetics

Phonetics refers to the sound system acceptable to a given linguistic community.

Semantics

Semantics is a branch of philology which deals with the meaning of words.

Lexicon

Lexicon refers to the vocabulary of a language as distinguished from its grammar or construction.

Design of the Study

The sample consisted of three classes of grade 10 French 11 students who are studying French with the _Voix et Images de France_ method. The pretest-posttest control group design (Campbell and Stanley, 1973) was employed. Each class as a whole was randomly assigned to one of the three possible groups: Group A, the control group; Group B, the oral cognate recognition group and Group C, the written cognate recognition group.

Hypotheses

The statistical analysis of the data is directed towards the following null hypotheses:

1. There is no significant relationship between the scores obtained on the QSVT and performance on the OCRT.

2. There is no significant relationship between the scores obtained on the QSVT and performance on the WCRT.

3. There is no significant difference among the adjusted means in oral cognate recognition as measured by the OCRT posttest for the three treatment groups when the QSVT and OCRT pretests are used as covariates.

4. There is no significant difference among the adjusted

means in written cognate recognition as measured by the WCRT posttest for the three treatment groups when the QSVT and WCRT pretests are used as covariates.

5. There is no significant interaction effect among the three groups and the OCRT pre- and posttest.

6. There is no significant interaction effect among the three groups and the WCRT pre- and posttest.

7. There is no significant interaction effect among the three groups and the QSVT pre- and posttest.

Delimitations

The present study is delimited in the following ways:

1. The sample is taken from one school only.

2. The sample is taken from one grade only.

3. The study is restricted to a short time period. It consists of six thirty-minute lessons in six weeks.

4. The study is restricted to recognition of a) oral cognate words and b) written cognates.

5. The possible facilitation of learning by the use of English-French cognates appears to depend upon a relatively large individual vocabulary power in English. For this reason secondary students participated in this experiment rather than elementary or junior high students.

6. The word list to be used in this study is delimited by the dictionary used to compile the cognate list. (Dictionnaire moderne français - anglais ,Larousse, 1960)

Limitations

1. The short time span constitutes one limitation.

2. Another limitation is the possible interference of regular French instruction which also may include some cognates.

3. The ability to recognize cognates may depend on how much practice the students have had with cognates in their regular instructional vocabularies.

4. The sample cognate words in the OCRT and WCRT are very limited.

5. Students' oral acuity and attention span are not controlled.

6. Differences in I.Q. and interests of the students are not controlled.

7. The oral and written recognition of cognates may require different strategies of instruction regarding cognates. It is possible that the instruction for oral cognate word recognition may require a longer time span than for written cognate recognition.

This chapter has introduced the problem and has provided a rationale for the need for the study as well as defining its confines. The second chapter will relate the major findings of relevant research studies which are pertinent to the present study including some suggestions by the investigator advocating the use of English-French cognates.

Chapter II

Review of the Relevant Literature

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The **Bibliography of Vocabulary Studies** by Edgar Dale
and Taher Razik lists 3,125 vocabulary studies (Dale &
Razik, 1963) of which 54 studies deal with methods of
acquiring and increasing vocabulary in a second language,
and 102 studies with vocabulary inquiries in second
languages. In their third revised edition of the
Bibliography of Vocabulary Studies studies from 1874
through December 1972 are included (Dale, Razik & Petty,
1973).

The use of cognates has been investigated for English
and German cognates (Chamberlin, 1905; Kern, 1908; West,
1902; Hammer, 1957), English and Spanish cognates
(Johnston, 1939; Nunn and Van Scroy, 1949; Anthony, 1952-
52; and Eichler, 1972) and English- French cognates
(Limper, 1931).

Whereas for English and Spanish or English and German
cognates the use is regarded as a device to relieve "...the
burden of remembering words separately" (Chamberlin, 1905 :
316) and serves "... as a means of effecting more
economical learning of vocabulary" (Johnston, 1939 :4),
investigations in English-French cognates stress their
avoidance. "Beware of cognates (false or true)" (Grittner,

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1969 : 92). Charles Fries writes that "practically no words
of one language, except highly technical words, ever cover
the same areas of meaning and use as those of another
language" (Fries, 1945 : 39). Wilkins states that "the
similarities between languages may at the same time
constitute a danger to any ambition that we may have to use
the foreign language with great accuracy" (Wilkins 1972 :
121).

This wariness of using English-French cognates
expressed by the above mentioned writers may be explained
in light of the empirical studies dealing with English-
French deceptive cognates. In order to prevent
misunderstandings between the English and French nations
which can "... en politique internationale entraîner les
plus catastrophiques conséquences" (Boillot,1956:7) several
word lists of deceptive cognates have been compiled. Félix
Boillot published Le Vrai Ami du Traducteur 1930, Jules
Derocquigny investigated deceptive cognates in 1931 in
Autres Mots Anglais Perfides . Maxime Koessler and Jules
Derocquigny compiled a wordlist of French-English deceptive
cognates entitled Les Faux Amis ou Les Pièges du
Vocabulaire Anglais 1946. In the preface of "Des Faux Amis
et de la Traduction" one reads :

>Homonymie n'est pas synonymie. ... L'homonymie
>partielle qui, par définition, excluait toute
>synonymie dans la langue maternelle, risque d'induire
>en erreur l'angliciste appelé à faire une version. Il
>est victime de la ressemblance verbale qu'offrent avec
>notre vocabulaire certains mots anglais d'origine
>latine ou française, et ne s'avise pas que la

similitude de forme n'entraîne pas nécessairement la similitude de sens (Koessler & Derocquigny, 1946: IX-X).

In 1956 Boillot published Le Second Vrai Ami du Traducteur in which he deals not only with homonyms but words "... qui ont la même étymologie mais qui n'ont pas évolué de la même façon dans les deux langues" (Boillot,1956:7). For example:

français	anglais
salaire, gages d'un ouvrier	salary, traitement d'un homme exerçant une pro-fession libérale
trivial, vulgaire	trivial, sans importance
voyage, déplacement général	voyage, déplacement par mer

It can be observed that the word lists of deceptive English-French cognates by Jules Derocquigny, Maxime Koessler, and Félix Boillot are intended for use by translators. About 500 deceptive cognates are listed with illustrations where a deceptive cognate has been incorrectly translated. Koessler and Derocquigny's dictionary of Les Faux Amis provides examples exclusively from literary translations, especially Shakespeare, up to the nineteenth century English novelists. But as Boillot points out

Les faux amis sont loin d'être définitivement stables car la signification des termes évolue avec le temps. ... Non seulement le simple jeu du temps mais l'évolution des moeurs introduisent dans le vocabulaire des modifications qui affectent la nature des faux amis (Boillot, 1956: 15).

Except for historical and scholarly interest, Koessler and Derocquigny's dictionary has little practical value for second language teaching in the classroom.

Robert Seward published in 1947 a _Dictionary of French Deceptive Cognates_ which is not specifically intended for translators but, as the author states, "... this list has been made partly as a suggestion to the makers of notes and vocabularies for the classroom texts" (Seward, 1946 : 7). Seward writes:

> ... the only way to establish a reliable list of really _deceptive_ cognates is for a number of conscientious teachers, well aware of this problem, to keep careful check for a few years on actual mistakes made because of deceptive cognates, indicating not only frequency, but the seriousness of the mistake: whether it involved a complete misconception or merely a poor choice amongst a number of near-synonyms. To the best of my knowledge this has not been done, but it would constitute a real advance in the task of charting the difficulty of going from French to English and vice versa (Seward,1946:8).

Until a glossary of deceptive cognates such as Seward discusses has been compiled specifically for school use, his dictionary could be employed in French second language teaching to Anglophones.

The following are some arguments in favor of using cognates as a vocabulary acquisition device:

1. Deceptive cognates are probably the least enduring types of interference between two languages. Francis Debyser in his article "Comparaison et interférence lexicales" writes concerning deceptive cognates:

> Les listes de faux amis sont amusantes mais ne
> signalent généralement qu'une faible part, la plus
> connue, mais, contrairement à ce que l'on croit la
> moins grave et la moins durable des interférences. ...
> les effets au niveau du message sont trop
> perturbateurs pour ne pas être rapidement corrigés
> (Debyser, 1971:53).

Debyser's statement is supported by the experimental findings of Hamers and Lambert, who concluded in their study "Bilinguals' Reaction to Cross-Language Semantic Ambiguity" that "... a linguistic marker primes one meaning of a homograph in such a way as to essentially eliminate the evocation of the alternate meaning" (Hamers and Lambert, 1974:112).

> It seems that Ss cannot ignore the verbal context in
> which a homograph or a SA (semantically ambiguous)
> word is presented and that all sensory input will
> evoke a meaning regardless of the fact that certain
> words can have ambiguous meanings whether in the same
> language or, for the bilingual, across languages
> (Hamers and Lambert, 1974:112).

2. Since the ratio of cognates to deceptive cognates is approximately 11,000 to about 950, the memory effort required by students to learn vocabularies could be greatly reduced by cognate study.

3. The acquisition of meaning amongst other factors is a gradual process consisting of progressive discrimination in learning the native language as well as a second one; it is never complete nor is it a simple process. Second language students of French can benefit from cognates and partial cognates because not all words are learned at the same time. With partial cognates an important tool for

vocabulary acquisition would be to encourage students not to envisage a totally static lexicon for the second language. As Vygotsky puts it: "Thought is not merely expressed in words, it comes into existence through them. The relation of thought to word is not a thing but a process" (Vygotsky, 1962:125). The relationship is dynamic, not static. However, students must be made aware not "... to equate all of the meanings of the (French) words with all of the meanings of the English cognate" (Anthony, 1952-53 :80-81).

By using cognates, reading in the second language may be facilitated by reducing the time spent looking up unknown words. Thus, the student is brought into contact with the target language on a larger scale. This in turn may help him to develop a _Sprachgefühl_ and sensitivity to lexical appropriateness as well as to structural forms. The vocabulary compiled in _Le Français Fondamental_ is a speech vocabulary. Studies have shown, that _Le Français Fondamental_ may not permit significant comprehension of the written language (Kist, 1962:20). With cognates the recognition and acquisition of a reading vocabulary may be facilitated.

4. The student does not have to become a philologist in order to learn some word endings if the form and meaning of the English and French cognates are otherwise the same. Chamberlin observes that:

> The amount of time required at first to master the principles (or rules about the corresponding English-French cognate endings) grows relatively less, in proportion as the number of cases increases to which it applies, until the time may be practically disregarded (Chamberlin, 1905 :316).

In addition, the formation of nouns, verbs, adjectives and adverbs in French could be illustrated with the words drawn from the cognate list and at the same time, by analogy, enrich the student's knowledge of his own language. Goethe said: "He who knows no foreign language does not truly know his own." In practical terms Vygotsky expresses it as follows:

> In his own language, the child conjugates and declines correctly, but without realizing it. He cannot tell the gender, the case, or the tense of the word he is using. In a foreign language, he distinguishes between masculine and feminine gender and is conscious of grammatical forms from the beginning. The child's strong points in a foreign language are his weak points in his native language, and vice versa (Vygotsky, 1962 : 109).

5. Another point in favor of using cognates stems from the suggestion made by Patrick O'Rourke in <u>Toward a Science of Vocabulary Development</u> in which he advocates "... a taxonomy of generative combining forms (roots, prefixes and suffixes)" (O'Rourke, 1974 : 108) to be systematically taught for practical word analysis. The acquisition of meaning may be enhanced by knowledge of key prefixes, roots and suffixes. Seashore mentions that "Philologists have shown that most of our modern language words are really derived from a relatively small number of roots ..." (Seashore & Eckerson, 1940 : 15). The Greek and Latin

suffixes which Jean Dubois (1962) lists in his book _Etude sur la Dérivation Suffixale en Français moderne et contemporain_ are generally as applicable to English as to French words. For example:

Prefix	Meaning	Example words
a-, an	(not, without)	apathy, atheism, aseptic
		apathie, athéisme, aseptique
bene	(well, good)	benefit, benediction, benevolent
		bénéfice, bénédiction, bénévole

Root	Meaning	Example words
magna	(great)	magnitude, magnificent, magnate
		magnitude, magnifique, magnat
med	(middle)	medium, mediocre, medieval
		médium, médiocre, médiéval

Suffix	Meaning	Example words
or, er	(one who)	actor, doctor, employer
		acteur, docteur, employeur
ism	(belief in)	communism
		communisme

Thus, cognate learning can aid vocabulary acquisition in two ways: 1) by enriching the vocabulary in the second language and 2) by complementing the vocabulary of the mother tongue.

6. With cognate words, the cultural evolution of the French and English languages could be studied. Parallel as well as divergent semantic development of words could be ascertained with reference to cognates, partial cognates

and deceptive cognates, because as Georges Gougenheim writes: "Les mots sont en effet le reflet de l'évolution des moeurs et des idées" (Gougenheim,1968 :7-8). A cultural unit could be built on words. Lexical borrowings, which fall loosely into the category of cognates, and are contained in the author's cognate list are, according to Gougenheim:

> ... les témoignages précieux des relations entre les peuples. Il serait vain de chercher quel est le peuple qui doit le plus aux autres: tout dépend du milieu et du moment. À l'époque actuelle, la multiplicité des emprunts dans les domaines scientifiques et techniques tend à créer un certain vocabulaire international qui répond à un des aspects de la civilisation moderne (Gougenheim,1968:30).

Cognates in Oral Comprehension

Cognates should prove to be of utility in facilitating reading, once the recognition of these cognates and the familiarity of meaning is taken into consideration. Concerning the oral recognition of cognates Mackey writes:

> ... il nous faudra distinguer dans la compréhension d'un mot, la forme orale de la forme écrite. Pour la compréhension de la parole, les mots qui ont une même orthographe, pour être semblables, ne nous sont pas d'un grand secours. Des mots comme nation , qui s'écrivent de la même façon en anglais et en français, ne se prononcent pas de la même façon dans la langue parlée: en anglais /neiʃn/ et en français /nasjõ/ (Mackey, 1972:136).

In keeping with the emphasis placed today upon communication and speech in second language teaching, cognates could be put to use for oral comprehension.

Speech, the primary form of language, is the major aim of language instruction. Although the probability of pupils visiting the country in which the language is spoken may be very low, most Canadian pupils, even those not living in the province of Québec, have access to one French radio station and one French television station and thus have the opportunity to hear French.

Ross, who proposed the use of international words (cognates) as phonetic exercises, states:

> Cognates provide a situation to register any differences or deviations in pronunciation in his own language, for the cognate word simply sounds like an oddly pronounced word in the student's own language (Ross, 1973 : 25).

What seems to be an odd pronunciation may simply stem from differences in the consonantal and vocalic systems of the English and French languages as well as from differences in stress, rhythm and intonation.

The oral recognition of cognates cannot be taken for granted. For example, the word "scene" has a French cognate "scène". By hearing it once, an English student studying French may not understand the word. Audio discrimination is conditioned by and limited to phonemes of one's own language. For second language learning, the realm of discriminating phonemes must be modified and extended in accordance with the phonetic system of the target language.

A comparison of the consonantal and vocalic systems of English and French, presented by Pierre Delattre reveals,

that, concerning the consonantal features, an American learning French "... has to learn only three really new consonants, the /ʀ/, /ɲ/ and /r/, (and for the vocalic system, nine) : /y/, /ø/, /oe/, the two low "a" sounds /a/ and /ɑ/, and four nasal vowels /ɛ̃/, /oẽe/, /ã/, /õ/" (Delattre, 1968 :82).

The question is what does the pupil have to know about French phonetics in order to understand cognates? From the analysis of the English and French phonetic systems, it becomes obvious that pupils will probably experience the greatest difficulty in oral comprehension with cognates which contain one or more of the 12 unfamiliar phonemes as well as with the pure vowel sounds in French. Methods of introducing the students to French pronunciation could be 1) "... to begin with a systematic presentation of sounds and clusters of sounds" (Ross, 1973:26) or 2) "... to leave the student to pick up the correct pronunciation in the process of learning other aspects of the language" (Ross, 1973:26).

Ross (1973) proposed the following procedure to use "international words" as phonetic exercises:

1. First the student hears the newly introduced word.
2. He is then asked to guess its meaning and here the correct meaning is given by the master voice, after the usual pause for student response (Ross, 1973:26).

Underlying the incorporation of cognates in phonetic exercises is the same assumption as that made for using

cognates in reading, that of capitalizing on the similarities and thereby reducing the disctinct and separate features between two languages.

Cognates in Reading Comprehension

A study directly pertinent to the present investigation is Louis Limper's (1931) inquiry into "Student Knowledge of Some French-English Cognates". Limper chose 1,499 words from the Vander Beke's French Word Book (1929) which have the same or similar form and meaning as the corresponding English words and designed simple-recall tests. The students were asked to write the English word which the French word suggested to them. Words whose English cognates did not appear in the first five thousand words of the Thorndike list were arranged in multiple choice tests to determine whether the students knew the meaning of the English cognates (Limper,1931:41). These tests were administered to grade nine, eleven and first year college students who had not studied French in a number of schools in the middle west (Limper, 1931).

The three relevant findings of Limper's study are:

1) ... it is not safe to assume that a French word will be recognized by beginners because it is similar in spelling to the English word of the same meaning, even if the latter is a word of high frequency (Limper, 1931 : 41). This inability (by some students) to overlook slight differences in the spelling of the words in the two languages constitutes one element of the difficulty in recognition (Limper, 1931 :44). 2.

(Another) difficulty is caused by unfamiliarity with
the English word, (Limper,1931:44) because English
words derived from the French are generally of lower
frequency than their Anglo-Saxon synonyms and hence
may not be known by many students (Limper,1931:40). 3)
(The third point, closely related to the second one is
that) ... the percentages of correct responses for
these words (Limper,1931:44) increased progressively
from grade nine to first year college students.

Thus, the facilitation effect of the English-French

cognates was found to depend on an extensive vocabulary

knowledge of the individual in his native language,

English.

The aim of the present study is to attempt to

incorporate the findings of Limper's study regarding: 1.

the recognition of cognates, 2. the possible unfamiliarity

with English cognates and 3. the need for a relatively

large English vocabulary power by students who study French

so they can utilize cognates to facilitate comprehension

and vocabulary acquisition once cognates are recognized.

The third chapter will present a description of the

sample, the oral and written cognate teaching units and the

tests used to evaluate the cognate teaching material.

Chapter III

Description of the Sample, the Experimental Treatment
and the Tests

The Sample

Three classes of grade ten, French 11 students participated in this study. French 11 students were selected mainly because secondary students are expected to have on the average a relatively larger vocabulary power than elementary or junior high students. In addition, since the teacher was teaching three French 11 classes, this situation was appropriate for the experimental design. One control class was required, one class for the treatment involving the oral recognition of cognates and a third class for the treatment involving the written recognition of cognates. A total of 83 students were involved.

Each student's I.Q. score, age, years of French instruction, final grade received in French in grade nine, national origin and parents' occupations were taken from the cumulative record and are summarized in Table 1. The Lorge-Thorndike I.Q. score was recorded for each student. Administration of the test ranged from 1970 to 1974. For some students the recorded I.Q. score was up to five years old. The range of I.Q. scores extended from 92 to 149 with

Table 1

Description of the Sample

Number of Students, I.Q. Score, Age, Years of French
Instruction, Final Grade in Grade 9, Sex, and Other
Languages Spoken

	Group A	Group B	Group C
Number of Students	25	30	28
Mean I.Q. (range)	117 (101 - 140)	116 (92 - 149)	112 (93 - 148)
Age in Years (range)	15.5 (14.9-16.9)	15.8 (14.7-17.2)	15.8 (14.4-16.7)
Years of French Instruction (range)	5.4 years (4 - 8)	5.3 years (3 - 7)	5.8 years (4 - 8)
Final French Grade	A = 13 B = 11 C = 1	A = 17 B = 6 C = 6 D = 1	A = 12 B = 9 C = 5 D = 1
Boys	5	7	8
Girls	20	23	20
Other Languages Spoken	German (3) Chinese (3) Spanish (1) Dutch (1)	German (1) Chinese (1) Punjabi (1) Ukrainian (1)	German (4) Chinese (2) Greek (1)

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a grand mean of 115. The year of birth ranged from 1958 to 1960. Sixty-three students, the majority of the group, were born in 1959. Years of French instruction ranged from a minimum of three years to a maximum of eight years: 1 student had three years, 22 students had four years, 17 had five years, 29 had six years, 10 students had seven years, and 4 had eight years of French instruction. Of the total sample of 83 students, 42 students had an A, 26 students a B, 22 students a C and two students a D grade in French on their grade 9 final report card. The socio-economic background for the sample was estimated by noting the occupation(s) of the parent(s) for each student. These ranged from skilled labour to graduate and post-graduate professional positions, with 39 parents having had university training. Roughly speaking, the socio-economic class of the sample may be characterized as middle class.

Teaching Unit

Permission to perform the study was obtained from the Edmonton Public School Board. The French teacher at one of the high schools in Edmonton volunteered to participate in the experiment. Students were not informed about the specifics of the experimental treatments nor that some examinations which were administered during that time were part of an experimental study in order to minimize the Hawthorne effect. There is no reason to believe that

motivational factors or other conditions apart from the experimental variable and the characteristics of the sample favored one or the other of the groups within the context of the treatments.

Six lessons lasting approximately 30 to 35 minutes each were presented to the two treatment groups on six consecutive Mondays. The experiment proper was carried out over a period of six weeks from April 21 to May 26, 1975 not including the pre- and posttests. The regular class teacher administered the pre- and posttests as well as teaching the material for the oral and written cognate recognition treatment.

Oral Cognate Recognition Teaching Unit

The objectives for the oral cognate recognition teaching unit were, first, to inform students about the existence and properties of English-French cognates, and, second, to provide students with the necessary phonetic knowledge of the French language to facilitate pronunciation and comprehension of English-French cognates.

The instructional material used to achieve these objectives included:
Day I a handout including the definition of cognates, 24 English-French cognate word-ending regularities, and a list of the most frequent deceptive cognates contained in Le

<u>Français Fondamental, Premier Degré</u> ,

<u>Day II</u> review of the sounds of the French alphabet and a handout on the French vocalic system,

<u>Day III</u> the French nasal vowels and four cognate word-ending regularities with ten example words for each category,

<u>Day IV</u> another four cognate word-ending regularities with ten example words for each category and a pre-recorded wordlist of twenty English-French cognates,

<u>Day V and VI</u> a different practice cognate wordlist of 20 lexical items and four different cognate word-ending regularities with ten example words for each category were used.

For further details see Experimental Treatment for the Oral Recognition of Cognates, Appendix A, lesson material and objectives.

Two instructional strategies were adopted to achieve the objectives: 1) The student was asked to apply his phonetic knowledge of French to the pronunciation of the English-French cognate words in French and 2) The reverse approach in which the student was presented with pre-recorded oral French cognate words and was asked to guess the equivalent English word.

The literature concerning phonetic instruction supports the teaching of phonetics. Tomatis emphasizes the value of phonetic instruction as follows: "... correct

audition brings forth near perfect phonation and accurate audition and phonation facilitate understanding and expression" (Tomatis, 1963). Monod writes, "In schools the important thing is to master the sound system at the phonemic level which is necessary in order for communication to take place" (Monod, 1971:89).

A review of the sounds corresponding to the French alphabet was included in the oral cognate recognition teaching unit in order to make students aware of sound-letter correspondence. Galland who investigated the structural relationship between the spelling and pronunciation of words in modern French (Galland, 1941: 478) concluded from his study that :

> The 21 sound-characters having counterparts in the letter frequency make up 78 percent of the entire sound-character total. (p. 485) ... (and) a complete absence of concordance exists in 22 percent of the sound occurrences, and that the condition occurs and falls within the group consisting of six percent of the letter frequency. (p. 486) For the following twelve consonants r, s, l, t, d, p, m, n, v, f, b, g ... a very appreciable percentage of concordance exists between the sound and its represented spelling (Galland, 1941:484).

Since there are only three phonemes in the French consonant system which an Anglophone studying French has to master, but nine French vowels, proportionately more time was devoted to the study of the French vocalic system and students received a handout to which they could refer when trying to pronounce the English-French cognate words in French. Since only comprehension of isolated words was

dealt with, intonation, rhythm and pitch received only secondary attention.

Keeping in mind the time limit of the experiment, the emphasis in the teaching unit for the oral cognate recognition group was placed on unfamiliar and differing phonemes in French.

The Written Cognate Recognition Teaching Unit

The objectives for the written recognition of the cognate teaching unit were 1) to inform students about the existence and properties of English-French cognates and 2) to help students recognize written cognates and thereby to increase their passive vocabulary. Recognition, not recall was the criterion.

The instructional material used to achieve these objectives included:

Day I a handout including the definition of cognates, 24 English-French cognate word-ending regularities, and a list of the most frequent deceptive cognates contained in Le Français Fondamental, Premier Degré ,

Day II four cognate word-ending regularities with ten example words for each category, a review of the French noun characteristics, and a French excerpt "La Renaissance italienne" ,

Day III another four cognate word-ending regularities with

ten example words for each category, a list of the meanings of the suffixes contained in the cognate word-ending regularities, their morphological characteristics and a French excerpt "La Pollution",

Day IV a further four cognate word-ending regularities with ten example words for each category, a review of the French verb characteristics and a French excerpt "L'Empire Inca",

Day V four additional cognate word-ending regularities with ten example words for each category, a review of the French adjective characteristics and a French excerpt "Les Dinosaures",

Day VI a review of the French adverb characteristics, information about the use of context clues in word recognition and comprehension, and a French excerpt "L'Avenir de l'Amérique Centrale".

For further details see Experimental Treatment for the Written Recognition of Cognates, Appendix A, lesson material and objectives.

The instructional strategies used to acquire and practice the recognition of written cognates were 1) the presentation of isolated English-French cognates which were defined in French and served to illustrate the sixteen cognate word-ending regularities which were selected for the treatment and 2) the reading and analysis of the French excerpts.

The investigator decided for the following reasons

that the definition of the English-French cognates should be presented in French: 1) Grade 10, French 11 students have four or more years of French instruction; 2) Practicing previously learned words and expressions is an additional benefit in using explanations and definitions in the target language (Wiens, 1948:17). 3) Since the student is called upon to reason from the known to the unknown, his linguistic reasoning faculty might be developed. 4) Students should start with a clear equation of concepts, not just a meaningless equation of words (Eoff & Bull, 1948:5). A translation of the English-French cognate word may be of no use if the student does not know the word in English.

The French definitions accompanying each of the ten example words in the cognate word-ending regularities are condensations rather than exact quotations from Le Petit Robert and were verified with the Webster's New International Dictionary .

The decision influencing the selection of the excerpts was determined by:

1) the student's comprehension level in the second language, that is to say, by his vocabulary knowledge in the target language,

2) the age of the sample, (the French excerpts were selected from Vidéo-Presse , a magazine intended for teenagers),

3) the authenticity of the language usage in the excerpts,

4) the context learning situation for vocabulary acquisition provided by the excerpts, and

5) the opportunity provided by the excerpts for practicing cognate recognition.

The presentation order of the excerpts was determined partly by the order of the presentation of the cognate word-ending regularities. For example, the excerpt "La Renaissance italienne" contained quite a few examples of the "-ie" cognate word-ending regularity. Thus, students could apply their knowledge of the first four word-ending regularities to this excerpt. In addition, the French noun characteristics and, in the subsequent lessons concerning the verb, adjective and adverb characteristics, could also be studied with the excerpts. Since not only the first four cognate word-ending regularities were contained in the excerpts, students had a handout including the 24 cognate word-ending regularities and the most frequent deceptive cognates to which they could refer when reading the excerpts.

The French noun, verb, adjective and adverb characteristics were included in the teaching unit to provide students with assistance in word analysis. For example, suffixes which determine the part of speech of words do not necessarily affect the essential meaning of the word, e.g. "rapide" is an adjective, "rapidité" a noun,

and "rapidement" an adverb. Thus from knowledge of the primary word students could be guided to understand derived words.

The investigator decided upon the use of the lecture presentation for the following reasons: 1) the lecture method is an efficient method to transmit knowledge (see Ausubel, 1967), and 2) the time available for the study was limited (six lessons of 30 to 35 minutes). The investigator and teacher in consultation decided not to omit any of the prepared teaching material except that the teacher agreed to modify the lecture presentation to a questioning approach if the information was already known by students. For example, this was expected to occur to some extent with the French noun, verb, adjective and adverb characteristics, the knowledge of the meanings of the suffixes which the English and French languages share, and the study of the French alphabet.

The use of cognates in second language acquisition may be regarded as a tool for vocabulary development. Unfortunately, as the review of the literature concerning vocabulary development reveals, research evidence does not point to a single best approach to teaching vocabulary. Weintraub (1968) and O' Rourke (1974) suggest the teaching of roots and affixes, Hartwig (1974) and Deighton (1959) the use of context and Traxler (1931) the memorization of words.

To develop or facilitate the use of cognates in vocabulary acquisition the linguistic reasoning ability of the student must be developed. The investigator felt justified to combine a variety of techniques concerning vocabulary development and to include 1) knowledge of morphology, 2) word parts (roots and affixes) and 3) context clues to aid in reading comprehension. It should be noted that word part analysis and the use of context clues if taught in the English language class may be applicable to the study of English-French cognates in French as a second language.

A detailed description of the tests used to measure the effectiveness of the teaching material on oral and written cognates follows.

The Tests

The investigator consulted the Educational Psychology Testing library at the University of Alberta, the Curriculum Examination Branch of the Province of Alberta and the School Book Branch about available vocabulary tests. Unfortunately, no standardized English vocabulary test was designed for and in use in Alberta. Intelligence tests contain vocabulary sections but they provide too small a vocabulary sample for the purpose of this study. Thus, the investigator decided to use the Quick-Scoring

Vocabulary Test (QSVT), Grades 9 to 13. This test was selected because the vocabulary used in the test was judged by the investigator to be appropriate for the ages of the students in the sample and because the test measures students' knowledge of the meaning of words rather than spelling or some other aspect of vocabulary.

Quick-Scoring Vocabulary Test (QSVT)

The Quick-Scoring Vocabulary Test was designed by the Department of Educational Research, Ontario College of Education and is presented in full in Appendix B of this study, including the scoring key.

The test consists of two parallel forms: forms A and B, each containing 90 items with five multiple choice answers. Standardization information for this test is given in the Manual of Directions.

> Both forms of the Quick-Scoring Vocabulary Test were administered in a standardization testing programme in November, 1956, to the following numbers of students drawn from all parts of Ontario and from all types of schools: Grade 9, 2639; Grade 10, 1872; Grade 11, 1550; Grade 12, 1434; and Grade 13, 1133. (p. 3)

Concerning the reliability of the test, "... the parallel forms estimates of reliability are:

Grade	Reliability Coefficient
9	.90
10	.93
11	.93
12	.93
13	.93

(Manual of Directions, page 4)

Oral Cognate Recognition Test (OCRT)

The OCRT was designed by the investigator and was revised three times. The first test version consisted of thirty-four orally presented English-French cognates pronounced twice in French by the investigator. The student was asked to select his answer from four written multiple-choice English-French cognates which started with the same phoneme-grapheme as the orally presented stimulus cognate. Students were asked to interpret the acoustic property of cognates in relation to the graphemes. This first attempt at designing the cognate word test had the short-comings of confounding two abilities, that of auditory discrimination and that of reading ability.

In the second revision of the oral cognate test the stimulus cognate word as well as the four multiple-choice English words were presented orally. In addition, the phonetic transcriptions of the English-French cognates had been compared in order to ascertain the number of phonemes which differed between the English and French pronunciation, and then listed in order of increasing number of different phonemes contained in the stimulus cognate. Ten of the stimulus cognate words were contained in the vocabulary list of Le Français Fondamental, Premier Degré and were employed in Voix et Images de France .

Forty of such items were randomly divided into two

lists of twenty items. The order of the possible choice words within the answer sets was random. The tape recording of the OCRT was performed by a native French speaker and by a native English speaker. The French cognate word was pronounced twice, and after two seconds the four English multiple-choice words were each presented once. The student had five seconds to record his answer on a multiple-choice answer sheet before the next stimulus cognate word was presented. The same timing was observed throughout the test.

This test was administered to fourteen university students enrolled in Ed. C. I. 459 at the University of Alberta. Since these students were going to be French instructors, they should have answered each item correctly, which they did. In addition, the students made some useful suggestions on how to improve the directions for the test by including two examples preceeding the test proper.

The second revised test was piloted on 42 French 11 students. The item analysis performed on the results showed that the test was far too easy for French 11 students. The DERS: TEST01 item analysis which provided this information is summarized in Table 2.

The test mean for part I was 19.95 and for part II 20.49 for 22 items. Internal consistency, as calculated with the Kuder Richardson 20 formula was -0.08 for part I and 0.49 for part II. With a mean item difficulty of 0.91

Table 2

Item Analysis of the Second Revised OCRT Part I and II
Means, Test Reliability, and Biserial Correlation

	OCRT, Part I	OCRT, Part II
Number of French 11 Students	42	42
Test Scores		
Mean	19.95	20.48
Range	17 - 22	15 - 22
Variance	1.43	2.20
Kuder Richardson 20	-0.08	0.49
Item Difficulty		
Mean	0.91	0.93
Range	0.48 - 1.00	0.50 - 1.00
Biserial Correlation		
Mean	0.33	0.42
Range	0.00 - 0.88	0.00 - 0.96

it is possible to obtain a negative KR20 coefficient because the KR20 is calculated on too few items, and thus may fluctuate. Item difficulty, expressed as the percentage of students answering an item correctly, ranged from 0.48 to 1.00 for part I and from 0.50 to 1.00 for part II which indicates that the test items were too easy for French 11 students. The biserial correlations for part I ranged from 0.00 to 0.88 and part II from 0.00 to 0.96. Item reliability indices were not available. The second revised OCRT had two shortcomings, first, the test was too easy and second, too short.

In the third revision of the test, the lexical items contained in Le Français Fondamental, Premier Degré were replaced with cognates not contained in Voix et Images de France because the investigator was interested in determining the recognition of unfamiliar cognates. Thus, vocabulary students knew was not useful for responding to the test items. Items with a difficulty range of 0.25 to 0.80 were retained in the final OCRT version. In addition, the number of lexical items was increased from twenty to thirty items.

In the construction of the third revised OCRT the English multiple-choice response alternatives were selected in such a manner as to obtain information on students' response style. One of the English multiple-choice words approaches as much as is possible the pronunciation of the

French stimulus cognate word, one of the four multiple-choice words corresponds to the French cognate word, and two English words are distractors. The English multiple-choice words start either with the same grapheme or phoneme as the cognate stimulus word.

In responding, students are required to interpret the acoustic properties of the cognates in relation to the English word. Theoretically, it is possible that students could base their responses on the perception of the cognate's meaning rather than on the sounds contained in the word. This did occur in the second revised OCRT with the ten stimulus cognate words employed in _Voix_ _et_ _Images_ _de_ _France_ which students knew. Ianco-Worrall writes: "Exploratory studies have shown that ... semantic preference increases with age" (Ianco-Worrall, 1972 : 1391) and probably with an increased knowledge in the second language. However, because students may or may not know the English words , the key to the correct response on the OCRT test may be based upon correct auditory discrimination.

Eighty-eight French 11 students wrote this test for piloting purposes. The DERS: TEST04 provided the information on the item analysis to be seen in Table 3. The mean, range, variance and KR20 are very close for the two parallel forms of the OCRT: For part I the mean is 17.50, range is 10 to 26, variance is 11.50 and KR20 is 0.53 and for part II the mean is 16.91, the range is 10 to 21,

Table 3

Item Analysis of the Third Revised OCRT Test Part I and II
Means, Test Reliability, Biserial Correlation and Item
Reliability Index

	OCRT, Part I	OCRT, Part II
Number of French 11 Students	88	88
Test Scores Mean	17.50	16.91
Range	10 - 26	10 - 26
Variance	11.50	11.61
Kuder Richardson 20	0.53	0.52
Item Difficulty Mean	0.58	0.56
Range	0.17 - 0.98	0.09 - 0.91
Biserial Correlation Mean	0.40	0.36
Range	0.02 - 0.80	0.13 - 0.71
Item Reliability Mean	0.11	0.11
Range	0.00 - 0.21	0.02 - 0.28

variance 11.61 and KR20 is 0.52. The Pearson product moment correlation between part I and part II was found to be 0.80.

The third revised OCRT is presented in full in Appendix B of this study, including the scoring key. The item analysis for the OCRT test part I based on the scores of 78 students who completed the OCRT, part I as the pretest is presented in Appendix C of this study.

The investigator decided to use cognates in isolation in the OCRT rather than in a linguistic context because of the possibility of confounding the comprehension of a sentence with the auditory discrimination of the word. Concerning vocabulary learning, Lord notes that "... there is an almost conspiratorial unreadiness to admit that vast areas of lexis are unaffected by syntactic considerations" (Lord, 1974 : 239). It may be noted that in the cognate list, nouns are predominant. Uriel Weinreich explains the predominance of nouns in the following way: "The reason is probably of a lexical-semantic, rather than a grammatical and structural nature" (Weinreich, 1953 : 37).

Essentially, code-switching is required in the oral cognate test. The student hears a French word, pronounced in French, and has then the choice of matching the word to one of the four English words pronounced in English. Kolers has demonstrated that "Code-switching is inhibitory for production but irrelevant for comprehension" (Kolers, 1966

: 371). In his experiment the subjects were asked to read aloud linguistically mixed material. Three kinds of errors were observed: 1. phonological: a word was pronounced with the accent of the other language, 2. translational: words were translated into the other language to conform to the antecedent words, and 3. ordinal: syntactic rearrangements were made.

Concerning the investigation of oral comprehension of cognates, both Winitz and Reeds agree that comprehension precedes production.

> Diese Reihenfolge -- erst verstehen, dann sprechen -- wird ... als eine funktionale Eigenschaft des menschlichen Gehirns angesehen, die auch beim Fremdsprachenunterricht beachtet werden sollte (Winitz and Reeds, 1973 : 295).

Written Cognate Recognition Test (WCRT)

The WCRT was revised three times. The first version consisted of a paragraph containing 77 lexical items of which 33 were cognates not contained in Le Français Fondamental, Premier Degré . The directions to the students were: "Underline the words you think you know and then write the English equivalent for the words underlined." One of the two paragraphs taken from Vidéo-Presse , "Revue mensuelle pour les jeunes" was intended as a pretest and one as a posttest. The decisions regarding the use of a written passage for cognate identification in the WCRT were 1) that words in isolation can have several meanings as the

meaning of a given word is determined by its context and 2) through reading the student is exposed to authentic "... samples of natural language ... produced by native speakers for consumption by native speakers" (Wilkins, 1972:172). The acquisition of vocabulary through reading is possible because the linguistic context can make the specific meaning of the word clear.

Objections to the first version of the WCRT test were that neither the syntactic structures nor the occurrence of cognates were controlled in the two paragraphs. Subsequently, the investigator wrote 26 French sentences of which thirteen were parallel in syntax and included the same number of cognate words from the list of cognate word-ending regularities. The student was asked to read the sentence and write down the translation for the numbered words in the sentence on the test booklet.

The shortcomings of this test became evident after having piloted this test on 42 grade 10, French 11 students. The test appeared to not only measure translation ability but also spelling ability. For example, the French-English cognate "altitude" was spelled in English "atitude". Did the student make a spelling mistake, meaning "altitude" or did he think the word meant "attitude" not knowing how to spell the word correctly? In addition, the test was too easy for French 11 students.

The final revision of the WCRT consisted of designing

a multiple-choice French sentence test controlling as before the syntactic structures of the sentences. In addition, the vocabulary knowledge of Grade 10, French 11 students was controlled in the leads so as to prevent blanks due to unfamiliarity with the lexical items. The vocabulary was limited to lexical items contained in the first eleven lessons of Voix et Images de France covered by French 11 students and the use of cognates. In order to validate the test, an associate professor from the Romance Language Department at the University of Alberta read the test and examined the possible multiple-choice responses before the administration. Since students were asked to record their answers on multiple-choice answer sheets rather than writing out their answers in full, the test was expanded to include thirty sentences. The final version was piloted on forty French 11 students in two classes. The presentation of the two parallel tests was alternated, one class starting with part I, the other with part II and vice versa.

Item analysis was performed and the results are summarized in Table 4. The mean, range, variance and KR20 are very close for the two parallel forms of the WCRT: For part I, the mean is 16.72, range is 10 to 24, variance 12.55 and KR 20 is 0.59 and for part II the mean is 16.65, range is 10 to 24, variance is 13.33 and KR20 is 0.57. The Pearson product-moment correlation between part I and part II was found to be 0.77. Three sentences with negative or

Table 4

Item Analysis of the Third Revised WCRT Part I and II
Means, Test Reliability, Biserial Correlation and
Item Reliability

	WCRT, Part I	WCRT, Part II
Number of French 11 Students	40	40
Test Scores		
Mean	16.72	16.65
Range	10 - 24	10 - 24
Variance	12.55	13.33
Kuder Richardson 20	0.59	0.57
Item Difficulty		
Mean	0.56	0.56
Range	0.05 - 0.98	0.05 - 1.00
Biserial Correlation		
Mean	0.41	0.33
Range	0.17 - 0.76	0.63 - 1.00
Item Reliability		
Mean	0.12	0.12
Range	-0.07 - 0.29	-0.04 - 0.27

low biserial correlation were eliminated, thus leaving twenty-seven sentences in each test. The item analysis for the WCRT part I with twenty-seven sentences is summarized in Table 5. The WCRT part I and II (pre- and posttest) is presented in full in Appendix B of this study including the scoring key. The item analysis for the WCRT test part I based on the scores of 80 students is presented in Appendix C of this study.

Particular care was taken by the investigator in the process of constructing and revising the OCRT and WCRT to follow the outline for the selection of multiple-choice answers and the design of objective tests as discussed by Robert Lado in Language Testing (1964) and by Rebecca Valette in Modern Language Testing (1967).

For the experiment the pretests were administered to 83 students out of which 74 students completed all three pretests. The pretests were administered in the following order and on the following dates:

	Group A control	Group B written	Group C oral
April 14	Q S V T	O C R T	W C R T
April 15	W C R T	Q S V T	O C R T
April 16	O C R T	W C R T	Q S V T

Group A was the control group. Group B was trained in the written recognition of cognates. Group C was trained in the

Table 5

Item Analysis of the Third Revised WCRT Test Part I
with 27 Sentences, Mean, Test Reliability, Biserial
Correlation and Item Reliability Index

	WCRT, Part I
Number of French 11 Students	80
Test Scores Mean	19.25
Range	10 – 24
Variance	11.29
Kuder Richardson 20	0.64
Item Difficulty Mean	0.72
Range	0.25 – 0.98
Biserial Correlation Mean	0.54
Range	0.14 – 0.81
Item Reliability Mean	0.12
Range	0.01 – 0.24

oral recognition of cognates. The posttests were administered in the same order for each group from June 2 to June 4, 1975. Due to absence at the pretests the total sample consisted of 74 students: sixteen boys and fifty-eight girls.

In the fourth chapter the analysis of the data and the interpretation of the results are presented.

Chapter IV

Results and Interpretation

The computations involved in the analysis of the data were performed on the University of Alberta IBM 360/67 computer using programs from the computer library of the Division of Educational Research Services. A probability value of 0.05 was used to determine the acceptance or rejection of the null hypotheses which were presented earlier in this study.

In this chapter the results of the correlations between part I and part II used as the pre- and posttest of the QSVT, the OCRT and the WCRT tests will be presented first. This will be followed by the intercorrelations among the three pre- and posttests, the analysis of covariance and the two way analysis of the three groups and the OCRT, WCRT and QSVT pre- and posttests. Finally, the results of the students' questionnaire evaluation of the oral and written cognate teaching material will be presented.

With pre- and posttest measures using parallel tests it is important to determine the extent to which both measures are correlated because a high correlation between part I and part II is required in order that the tests be regarded as parallel. The correlation of part I and part II of the QSVT (Form A and B), the OCRT and WCRT for group A,

B and C are summarized in Table 6. The mean on part I of the QSVT was 54.08 and 53.92 on part II. These means are nearly identical. Likewise the standard deviations of part I and part II 15.44 and 15.53 respectively, are parallel. The Kuder-Richardson 20 formula, measuring internal consistency or homogeneity of the test material is high, with an obtained value of 0.98 (Ferguson, 1971 : 368). The correlation between part I and part II is 0.96 ($p < 0.001$). Thus prediction, or variability accounted for, is very high with 92 per cent of the variance in common. The mean of part I on the OCRT was 18.04 and 18.95 of part II. The higher mean obtained on the OCRT part II administered as the posttest may be attributed to the oral cognate treatment effect of group C which is also reflected in a reduced standard deviation on part II 3.46 in comparison with 3.92 on part I. The Kuder-Richardson 20 correlation coefficient on the OCRT is 0.75. The correlation coefficient of part I and part II is 0.61 ($p < 0.001$). The variability in common is only 0.37. For the WCRT the mean of part I is 19.51 and 19.16 of part II. The standard deviation of part I is 3.24 and 3.27 of part II. The Kuder-Richardson 20 correlation coefficient is 0.70. The correlation coefficient of part I and part II is 0.54 ($p < 0.001$) with an associated prediction power of 0.29. The reduced mean of the WCRT posttest can be explained by comparing the means of group A, B and C on the WCRT pre- and posttest. For group A, B and C the means on the WCRT

Table 6

Means, Standard Deviations, KR20 and Correlation

Coefficient of Part I and Part II of the QSVT

(Form A and B), the OCRT and the WCRT

	QSVT		
	Part I	Part II	r
Mean	54.08	53.92	0.96 ***
SD	15.44	15.53	
KR20	0.98		

	OCRT		
Mean	18.04	18.95	0.61 ***
SD	3.92	3.41	
KR20	0.75		

	WCRT		
Mean	19.51	19.16	0.54 ***
SD	3.24	3.27	
KR20	0.70		

Note Total number of students = 74
*** $p < 0.001$

pretests are 19.58, 19.44 and 19.52 and 18.38, 20.80 and 18.28 on the WCRT posttest. It may be inferred from these results that part II of the WCRT was more difficult than part I. Only the written cognate recognition treatment group B improved in their group mean on the WCRT posttest.

Intercorrelations of the QSVT with the OCRT and WCRT Tests

The discussion of the intercorrelations of the QSVT pretest with the OCRT and WCRT pretests is followed by an examination of the intercorrelations of the same tests on the posttests. The results for the intercorrelations among the QSVT, the OCRT and WCRT pretests for group A are summarized in Table 7, for group B in Table 8, and for group C in Table 9.

The hypotheses to be tested were:

1. There is no significant relationship between the scores obtained on the QSVT and performance on the OCRT, and
2. There is no significant relationship between the scores obtained on the QSVT and the performance on the WCRT.

The null hypotheses can be rejected for both hypotheses at or exceeding the probability level of 0.05 for all three groups of intercorrelations among the pretests. For group A the correlation of the QSVT with the OCRT was 0.70 ($p < 0.001$), group B 0.47 ($p < 0.05$) and group C 0.40 ($p < 0.05$). The correlation of the QSVT with the WCRT pretest

Tables 7

Means, Standard Deviations and Intercorrelations Among the
QSVT Pretest (Form A) and the OCRT and WCRT Pretests
for Group A, the Control Group

Tests	QSVT	OCRT	WCRT
Mean	53.13	17.21	19.58
SD	13.66	3.25	3.39
OCRT	0.70***		
WCRT	0.44*	0.17	

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* p < 0.05

*** p < 0.001

Table 8

Means, Standard Deviations and Intercorrelations Among the

QSVT Pretest (Form A) and the OCRT and WCRT Pretests

for Group B, the Written Cognate Recognition Group

Tests	QSVT	OCRT	WCRT
Mean	58.88	18.88	19.44
SD	14.64	4.30	3.73
OCRT	0.47*		
WCRT	0.47*	0.48**	

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  * p < 0.05

** p < 0.01

Table 9

Means, Standard Deviations and Intercorrelations Among the
QSVT Pretest (Form A) and the OCRT and WCRT Pretests
for Group C, the Oral Cognate Recognition Group

Tests	QSVT	OCRT	WCRT
Mean	50.20	18.00	19.52
SD	16.53	3.94	2.47
OCRT	0.40*		
WCRT	0.74***	0.49**	

  * p < 0.05

 ** p < 0.01

*** p < 0.001

for group A was 0.44 (p < 0.05), for group B 0.47 (p < 0.05) and for group C 0.74 (p < 0.001). For group A the QSVT correlates at the 0.001 level with the OCRT which is the reverse of group C where the WCRT correlates at the 0.001 level with the QSVT. Group B obtained the same statistically significant correlation 0.47 (p < 0.05) on the QSVT with the OCRT and the QSVT with the WCRT. The difference in significance levels achieved for the intercorrelations between the QSVT with the OCRT and the QSVT with the WCRT pretests may be an indication, apart from idiosyncracy of the students in the three groups, of different instructional emphasis given to listening and reading skills in their second language studies.

A statistically significant correlation was found between the OCRT and WCRT test for group B 0.48 (p < 0.01) and group C 0.49 (p < 0.01) but not for group A. An intercorrelation between the OCRT and WCRT test seems plausible because both tests deal with vocabulary, particularly cognates. However, the OCRT measures phonetic discrimination and comprehension whereas the WCRT measures reading ability as well as lexical and syntactical comprehension. Since for the students in group A the intercorrelation of the QSVT and the OCRT test was highly significant (p < 0.001) it appears that for group A the aural skill (listening) bears little functional relationship with the reading skill. A possible explanation might be the disproportionate use of listening with respect

to reading.

The results of the intercorrelation of the QSVT, the OCRT and the WCRT posttests are summarized in Table 10, 11 and 12 for groups A, B and C, respectively.

The intercorrelation among the QSVT, the OCRT and WCRT posttests gave similar results when compared to the pretests for control group A. The correlation of the QSVT with the OCRT was 0.49 ($p < 0.05$) , as contrasted with the 0.001 level found on the pretest. The correlation between the QSVT and the WCRT was 0.40 ($p < 0.05$). Again, there was no statistically significant intercorrelation between the OCRT and the WCRT for group A.

For group B the intercorrelation of the QSVT and the OCRT posttest was 0.43 ($p < 0.05$) which was the same result as was achieved on the pretest for group B. The correlation of the QSVT posttest with the WCRT posttest did not reach statistical significance. However, the intercorrelation among the OCRT and WCRT posttests increased in statistical significance from the 0.01 level on the pretest to 0.001 level on the posttest.

For group C the intercorrelations on the posttests are similar to those on the pretests except that the intercorrelation coefficients reach higher statistical significance on the posttests for the QSVT and the OCRT ($p < 0.01$) and the intercorrelation of the OCRT and the WCRT ($p < 0.001$).

Table 10

Means, Standard Deviations and Intercorrelations Among the

QSVT Posttest (Form B) and the OCRT and WCRT Posttests

for Group A, the Control Group

Tests	QSVT	OCRT	WCRT
Mean	52.58	17.13	18.38
SD	14.31	3.07	2.86
OCRT	0.49*		
WCRT	0.40*	0.12	

----

* $p < 0.05$

Table 11

Means, Standard Deviations and Intercorrelations Among the

QSVT Posttest (Form B) and the OCRT and WCRT Posttests

for Group B, the Written Cognate Recognition Group

Tests	QSVT	OCRT	WCRT
Mean	58.40	20.16	20.80
SD	14.66	3.65	3.26
OCRT	0.43*		
WCRT	0.23	0.66***	

----

  * p < 0.05

*** p < 0.001

Table 12

Means, Standard Deviations and Intercorrelations Among the

QSVT Posttest (Form B) and the OCRT and WCRT Posttests

for Group C, the Oral Cognate Recognition Group

Tests	QSVT	OCRT	WCRT
Mean	50.72	19.48	18.28
SD	16.43	2.86	3.01
OCRT	0.50**		
WCRT	0.68***	0.62***	

** p < 0.01

*** p < 0.001

The assumption that the usefulness of cognates relates directly to the students vocabulary power in English is not negated by the findings on the intercorrelations of the QSVT and the cognate tests. The OCRT shows a consistent intercorrelation with the QSVT test on the pre- as well as the posttests. For the pretests, statistically significant results were obtained for all three groups. This finding does not hold for the intercorrelations on the posttests where for group B, no statitistically significant intercorrelation was found between the QSVT and the WCRT. A possible explanation for this finding may be as follows. Group B differed from group A and C in that it had the highest QSVT mean. Consequently not cognate recognition but syntactical difficulty may be responsible for the observed lack of correlation of the QSVT and WCRT posttests. Cognate recognition for group B should not be less than for the other two groups. That the problem may be one of syntactic difficulty, rather than lexical difficulty may be inferred from the mean of the written cognate recognition treatment group B. The WCRT posttest mean was raised two points but no perfect scores for this group were obtained. That the intercorrelation of the WCRT posttest with the QSVT posttest reaches no statistical significance may be interpreted in light of Miller's assertion (if it is correct): "We cannot understand a sentence until we are able to assign a constituent structure to it" (Miller, 1962: 751). Epstein, in agreement with Miller, concluded in

his study on the influence of syntactical structure on learning that "... syntactical structure facilitates learning separately from meaningfulness, familiarity and transitional dependency" (Epstein, 1962: 126). Braun-Lamesch writes that "clear perception of sentence element articulation is basic to comprehension" (Braun- Lamesch, 1962 : 187). Syntactical knowledge which would enable the student to organize speech into meaningful units was not taught to the written cognate recognition treatment group but appears to be an element in the WCRT.

One Way Analysis of Covariance

Since individuals were not randomly assigned to the control and two treatment groups, a quasi-experimental design was used in this study (Campbell and Stanley, 1973). The classes as a whole were randomly assigned to the three treatment groups, and analysis of covariance was employed to adjust for initial differences in English vocabulary power as measured by the QSVT and where appropriate the OCRT and WCRT were used as covariates.

First, the analysis of covariance on the OCRT and WCRT pretests will be presented. This is followed by the analysis of covariance of the OCRT posttest with the QSVT and the OCRT pretests as covariates and the WCRT posttest

with the QSVT and WCRT pretests as covariates. Finally, the analysis of covariance of the OCRT posttest using the QSVT and WCRT pretests and the WCRT posttest using the QSVT and OCkT pretests as covariates are presented. The results of the analysis of covariance of the QSVT posttest with the QSVT pretest as covariate are presented in Table C in Appendix D of this study.

OCkT Pretest with the QSVT and WCRT pretests as Covariates

The results of the one way analysis of covariance for the OCRT pretest with the QSVT and WCRT pretests as covariates are summarized in Table 13. The unadjusted means on the OCRT pretest are 17.21, 18.88 and 18.00 for group A, B and C. When these means are adjusted with the QSVT and WCRT pretests as covariates the adjusted means for group A, B and C are 7.51, 8.61 and 8.63. The adjusted means are in reversed order for group B and C. The reversed order of the unadjusted and adjusted means for group B and C may be attributed to initial differences on the QSVT pretest. The unadjusted variances for group A, B and C are 11.04, 19.28 and 16.17, respectively. Group A has the smallest unadjusted variance and group B the greatest. When these unadjusted variances are adjusted with the QSVT and WCRT pretests as covariates the adjusted variances for group A, B and C are 5.88, 14.23 and 13.27, respectively. There is no reversal of order of the unadjusted and adjusted variances for the three groups. The test for homogeneity of within group variances resulted in a X^2 value of 1.79 with

Table 13

Summary of the One Way Analysis of Covariance
The CCRT Pretest with the QSVT and WCRT
Pretests as Covariates

Comparison of the Unadjusted and Adjusted Means and
Variances of Group A, B, and C

| | Unadjusted | | Adjusted | |
	Mean	Variances	Mean	Variances
Group A	17.21	11.04	7.51	5.88
Group B	18.88	19.28	8.61	14.23
Group C	18.00	16.17	8.63	13.27

Homogeneity of within group variances χ^2 = 1.79 p = 0.41
Homogeneity of within cell regression coeff. test χ^2 = 4.57
p = 0.10

Analysis of Covariance

Source	SS	DF	MS	F-Ratio	Probability
Effects	19.71	2	9.85	0.85	0.43
Cov 1	134.88	1	134.88	11.60	0.001***
Cov 2	24.64	1	24.64	2.12	0.15
Errors	802.45	69	11.63		

*** p < 0.001

a corresponding probability level of 0.41 which does not reach statistical significance. Thus, the assumption of homogeneity of variances is not violated. The test that the slopes of the regression lines within the three groups are the same resulted in a χ^2 value of 4.57 with a corresponding probability of 0.1 which is not significant. The analysis of covariance shows that there is no main effect present among the three groups on the OCRT pretest, that is, the adjusted means obtained for the three groups do not differ statistically significantly. The WCRT pretest used as covariate does not attain statistical significance. Only the QSVT covariate reaches statistical significance at the 0.001 level, which indicates that the English vocabulary test is highly associated with the results obtained on the OCRT pretest.

WCRT Pretest with the QSVT and OCRT Pretests as Covariates

The results of the one way analysis of covariance for the WCRT pretest with the QSVT and OCRT pretests as covariates are summarized in Table 14. The unadjusted means on the WCRT pretest are 19.58, 19.44 and 19.52 for group A, B and C, respectively. When these means are adjusted for initial differences on the QSVT and OCRT pretests the adjusted means for group A, B and C are 12.12, 11.19 and 12.22, respectively. The reversed order of the unadjusted and adjusted means for group A and C may be attributed to initial differences on the QSVT pretest. The unadjusted variances for group A, B and C are 11.99, 14.51 and 6.34.

Table 14

Summary of the One Way Analysis of Covariance
The WCRT Pretest with the QSVT and OCRT
Pretests as Covariates

Comparison of the Unadjusted and Adjusted Means and
Variances of Group A, B, and C

| | Unadjusted | | Adjusted | |
	Mean	Variances	Mean	Variances
Group A	19.58	11.99	12.12	10.11
Group B	19.44	14.51	11.19	10.98
Group C	19.52	6.34	12.22	2.82

Homogeneity of within group variances χ^2 = 4.07 p = 0.13
Homogeneity of within cell regression coeff. test χ^2 = 10.33
p = 0.006**

Analysis of Covariance

Source	SS	DF	MS	F-Ratio	Probability
Effects	15.03	2	7.51	0.95	0.39
Cov 1	111.03	1	111.03	13.99	0.001***
Cov 2	16.82	1	16.82	2.12	0.15
Errors	547.52	69	7.94		

** p < 0.01
*** p < 0.001

Group C has the smallest unadjusted variance and group B the greatest. When these unadjusted variances are adjusted with the QSVT and OCRT pretests as covariates, the adjusted variances for group A, B and C are 10.11, 10.98 and 2.82, respectively. There is no reversal of the unadjusted and adjusted variances for the three groups, but the adjusted variances for group A and B are brought closer together. The test for homogeneity of within group variances resulted in a x^2 value of 4.07 with a corresponding probability of 0.13 which does not reach statistical significance. The test that the slopes of the regression lines within the three groups are the same resulted in a x^2 value of 10.33 with a corresponding probability of 0.006 which is highly significant. Fortunately, no statistically significant main effect is present among the three groups. The OCRT pretest used as covariate reaches no statistical significance, while the QSVT covariate reaches statistical significance at the 0.001 level.

OCRT Posttest with the QSVT and OCRT Pretests as Covariates

The results of the one way analysis of covariance for the OCRT posttest with the QSVT and OCRT pretests as covariates are summarized in Table 15. In order to determine any possible difference between the pre- and posttest results on the OCRT, the OCRT pretest has been used as covariate. The unadjusted means for group A, B and C are 17.13, 20.16 and 19.48, respectively. For group A, the means obtained on the OCRT pre- and posttest are nearly

Table 15

Summary of the One Way Analysis of Covariance
The OCRT Posttest with the QSVT and OCRT
Pretests as Covariates

Comparison of the Unadjusted and Adjusted Means and
Variances of Group A, B, and C

	Unadjusted		Adjusted	
	Mean	Variances	Mean	Variances
Group A	17.13	9.85	7.59	7.73
Group B	20.16	13.89	9.67	9.40
Group C	19.48	8.51	9.78	4.04

Homogeneity of within group variances X^2 = 1.52 p = 0.47
Homogeneity of within cell regression coeff. test X^2 = 3.88
p = 0.14

Analysis of Covariance

Source	SS	DF	MS	F-Ratio	Probability
Effects	72.21	2	36.10	5.42	0.007**
Cov 1	31.39	1	31.39	4.71	0.03*
Cov 2	131.84	1	131.84	19.79	0.001***
Errors	459.64	69	6.66		

Scheffé Multiple Comparisons of Means

Groups Compared	F-Value	p Value
Group A vs Group B	3.83	0.03*
Group A vs Group C	4.28	0.02*
Group B vs Group C	0.01	0.99

 ** p < 0.01
*** p < 0.001

identical with 17.21 and 17.13. When the QSVT and OCRT pretests are used as covariates the adjusted means for group A, B and C are as follows 7.59, 9.67 and 9.78. The adjusted means are in reversed order for group B and C relative to the unadjusted means due to initial differences on the two covariate measures. The unadjusted variances for group A, B and C are 9.85, 13.89 and 8.51. The oral cognate recognition group C has the smallest variance on the OCRT posttest. The adjusted variances for group A, B and C are 7.73, 9.40 and 4.04. The test of homogeneity of within group variances resulted in a X^2-value of 1.52 with a probability level of 0.47 which is not statistically significant. The test of homogeneity of the within cell regression coefficient resulted in a X^2-value of 3.88 with a probability level of 0.68 which is also not significant.

The hypothesis to be tested with the analysis of covariance was:

> there is no significant difference among the adjusted means in oral cognate recognition as measured by the OCRT posttest for the three treatment groups when the QSVT and OCRT pretests are used as covariates.

This hypothesis can be rejected far exceeding the 0.05 level of significance. The analysis of covariance shows a statistically significant main effect at the 0.007 level of significance among the three groups. Both covariates reach statistical significance, the QSVT at the 0.03 and the OCRT at the 0.001 level. The Scheffé multiple comparison of means resulted in a statistically significant difference at

the 0.03 level for the control group A and the written cognate recognition treatment group B, and a statistically significant difference at the 0.02 level for the control group A and the oral cognate recognition treatment group C. The comparison between group B and C was not significant.

WCRT Posttest with the QSVT and WCRT Pretests as Covariates

The results of the one way analysis of covariance for the WCRT posttest with the QSVT and WCRT pretests as covariates are summarized in Table 16. The unadjusted means for group A, B and C are 18.38, 20.80 and 18.28. When the QSVT and WCRT pretests are used as covariates the adjusted means for group A, B and C are 7.40, 9.62 and 7.47. Group B has the highest unadjusted and adjusted mean. Taking initial differences into account with the QSVT and WCRT pretests as covariates, the adjusted means for group A and C are reversed in relation to the unadjusted means. The unadjusted variances for group A, B and C are 8.51, 11.08 and 9.46. The written cognate recognition group B has the greatest variance, the control group A, the smallest one. The adjusted variances for group A, B and C are 6.10, 8.20 and 4.77 showing the same reversed order as the adjusted means for group A and C. The test of homogeneity of within group variances resulted in a x^2-value of 0.41 with a probability level of 0.81 which is not statistically significant. The test of homogeneity of the within cell regression coefficient resulted in a x^2-value of 1.59 with a probability level of 0.45 for which the null hypothesis

Table 16

Summary of the One Way Analysis of Covariance
The WCRT Posttest with the QSVT and WCRT
Pretests as Covariates

Comparison of the Unadjusted and Adjusted Means and
Variances of Group A, B, and C

| | Unadjusted | | Adjusted | |
	Mean	Variances	Mean	Variances
Group A	18.38	8.51	7.40	6.10
Group B	20.80	11.08	9.62	8.20
Group C	18.28	9.46	7.47	4.77

Homogeneity of within group variances $X^2 = 0.41$ p $= 0.81$
Homogeneity of within cell regression coeff. test $X^2 = 1.59$
p $= 0.45$

Analysis of Covariance

Source	SS	DF	MS	F-Ratio	Probability
Effects	73.27	2	36.64	5.89	0.004**
Cov 1	26.78	1	26.78	4.30	0.04*
Cov 2	105.76	1	105.76	16.99	0.001***
Errors	429.47	69	6.22		

Scheffé Multiple Comparisons of Means

Groups Compared	F-Value	p Value
Group A vs Group B	4.66	0.01**
Group A vs Group C	0.00	1.00
Group B vs Group C	4.28	0.02*

  * p < 0.05
 ** p < 0.01
*** p < 0.001

is not rejected.

The hypothesis to be tested with the analysis of covariance was that:

there is no significant difference among the adjusted means in written cognate recognition as measured by the WCRT posttest for the three treatment groups when the QSVT and WCRT pretests are used as covariates.

This hypothesis can be rejected at the 0.004 level of significance. The QSVT pretest used as covariate reaches statistical significance with an obtained probability level of 0.04 and the WCRT pretest covariate attains significance at the 0.001 level of significance. The Scheffé multiple comparison of means resulted in a statistically significant difference at the 0.01 level for the control group A and the written cognate recognition treatment group B as well as for group B and the oral cognate recognition treatment group C at the 0.02 confidence level. The comparison of group A versus group C was not statistically significant.

OCRT Posttest with the QSVT and WCRT Pretests as Covariates

The results of the one way analysis of covariance for the OCRT posttest with the QSVT and WCRT pretests as covariates are summarized in Table 17. Since initial differences on the OCRT pretest used as covariate are not partialled out when using the WCRT pretest as covariate; the adjusted means and variances for group A, B and C show no reversed order. The main effect of the analysis of covariance reaches a higher statistically significant level (p < 0.001) than using the QSVT and OCRT pretests as

Table 17

Summary of the One Way Analysis of Covariance
The OCRT Posttest with the QSVT and WCRT
Pretests as Covariates

Comparison of the Unadjusted and Adjusted Means and
Variances of Group A, B, and C

| | Unadjusted | | Adjusted | |
	Mean	Variances	Mean	Variances
Group A	17.13	9.85	6.25	8.16
Group B	20.16	13.89	9.02	9.48
Group C	19.48	8.51	8.80	4.80

Homogeneity of within group variances X^2 = 1.52 p = 0.47
Homogeneity of within cell regression coeff. test X^2 = 2.57
p = 0.28

Analysis of Covariance

Source	SS	DF	MS	F-Ratio	Probability
Effects	114.37	2	57.18	7.89	0.001***
Cov 1	38.41	1	38.41	5.30	0.02*
Cov 2	91.48	1	91.48	12.62	0.001***
Errors	500.16	69	7.25		

Scheffé Multiple Comparisons of Means

Groups Compared	F-Value	p Value
Group A vs Group B	6.24	0.003**
Group A vs Group C	5.43	0.007**
Group B vs Group C	0.04	0.96

   * p < 0.05
  ** p < 0.01
 *** p < 0.001

covariates. The QSVT pretest covariate is significant at the 0.02 and the WCRT pretest covariate at the 0.001 level. The Scheffé multiple comparison of means reaches a higher statistical significance for group A versus group B (p < 0.003) and group A versus group C (p < 0.007) but the comparison of group B versus group C reaches again no statistical significance.

WCRT Posttest with the QSVT and OCRT Pretests as Covariates

The results obtained are consistent when, instead of using the QSVT and WCRT pretests as covariates with the WCRT posttest, the QSVT and OCRT pretests are used as covariates. The results of the one way analysis of covariance for the WCRT posttest with the QSVT and OCRT pretests used as covariates are summarized in Table 18. Since intitial differences on the WCRT pretest used as covariate are not partialled out when using the OCRT pretest as covariate the reversed order of the adjusted means for group A, B and C may be attributed to initial differences on the QSVT pretest covariate. The adjusted variances show no reversed order relative to the unadjusted variances. The main effect of the analysis of covariance reaches statistical significance at the 0.05 level. Only the QSVT pretest covariate reaches statistical significance at the 0.001 level. Thus the OCRT is not a statistically significant predictor of performance on the WCRT posttest. The Scheffé multiple comparison of means falls short of statistical significance , but the trend of the comparison

Table 18

Summary of the One Way Analysis of Covariance
The WCRT Posttest with the QSVT and OCRT
Pretests as Covariates

Comparison of the Unadjusted and Adjusted Means and
Variances of Group A, B, and C

| | Unadjusted | | Adjusted | |
	Mean	Variances	Mean	Variances
Group A	18.38	8.51	12.20	7.43
Group B	20.80	11.08	13.98	10.53
Group C	18.28	9.46	12.27	5.42

Homogeneity of within group variances $X^2 = 0.41$ p = 0.81
Homogeneity of within cell regression coeff. test $X^2 = 2.37$
p = 0.31

Analysis of Covariance

Source	SS	DF	MS	F-Ratio	Probability
Effects	47.86	2	23.93	3.13	0.05*
Cov 1	84.55	1	84.55	11.07	0.001***
Cov 2	9.04	1	9.04	1.18	0.28
Errors	526.91	69	7.64		

Scheffé Multiple Comparisons of Means

Groups Compared	F-Value	p Value
Group A vs Group B	2.44	0.09
Group A vs Group C	0.00	1.00
Group B vs Group C	2.27	0.11

* p < 0.05
*** p < 0.001

of means is in the same direction as when the WCRT pretest was used as covariate.

In order to establish that the three obtained group means on the QSVT do no differ statistically significantly a one way analysis of covariance was calculated for the QSVT posttest with the QSVT pretest as covariate. The results are summarized in Table C and are presented in Appendix D of this report.

Two findings may be noted: 1. the statistically significantly improved performance of the written cognate recognition group B on the OCRT posttest and 2. that the reverse process did not occur, that is, the oral cognate recognition group C did not improve statistically significant on the WCRT posttest. Both treatment groups improved statistically significantly on the cognate posttests but not the control group.

In order to determine whether any interaction effect among the three groups and the pre- and posttest exists the two-way analysis of variance was carried out.

The two way analysis of variance for the OCRT is summarized in Table 19. There is a statistically significant main effect among the three groups at the 0.04 level of significance. The group means on the OCRT pretest are 17.21 for group A, 18.88 for group B and 18.00 for group C. The variances associated with the respective group

Table 19

Summary of the Two Way Analysis of Variance

for the OCRT

Source of Variation	SS	DF	MS	F	p
Between Subjects	1623.50	73			
'A' Main Effects	141.70	2	70.85	3.39	0.04*
Subjects Within Groups	1483.27	71	20.89		
Within Subjects	433.50	74			
'B' Main Effects	29.44	1	29.44	5.42	0.02*
'A*B' Interaction	17.87	2	8.94	1.65	0.20
'B' X Subj. Within Groups	385.56	71	5.43		

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* $p < 0.05$

means shows a large spread, for group A, the variance 11.04 is the smallest, next 16.17 for group C and 19.28 the greatest variance for group B. The control group A has a slightly smaller mean on the OCRT posttest with 17.13, and a reduced variance of 9.85. The relatively higher mean for group B 20.16 on the OCRT posttest is associated with a decrease in variance to 13.89. For the oral cognate recognition treatment group C, the group mean on the OCRT posttest increased to 19.48 with a marked decrease in variance to 8.51. Group C has the smallest variance on the OCRT posttest. The statistically significant main effect among the three groups on the OCRT is consistent with the finding of the one way analysis of covariance for the OCRT posttest with the QSVT and OCRT pretests as covariates. The difference in statistical significance may be attributed to the elimination of the two covariates. Scheffé's multiple comparisons of means in the one way analysis of covariance of the OCRT posttest was significant for group A versus group B and group A versus group C but not for group B versus group C. This finding shows up in the graphical representation of the two way analysis for the OCRT (see Figure 1). Group B and group C show a marked difference from the control group A but not between themselves as both groups show improvement on the OCRT posttest. There is a statistically significant effect on the pretest versus the posttest OCRT at the 0.02 level. The means of group B 20.16 and group C 19.48 increased on the OCRT posttest and
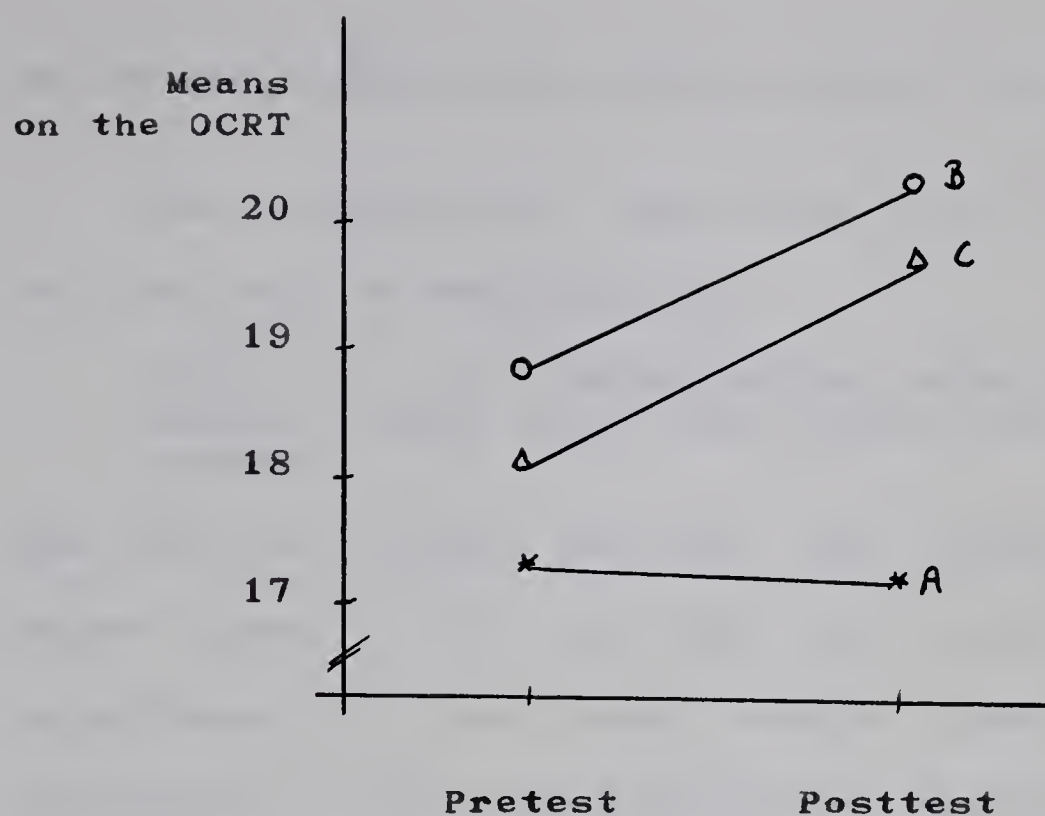
* Control group A
o Written cognate recognition group B
Δ Oral cognate recognition group C

Figure 1 Means on the OCRT Pre and Posttests for
Groups A, B and C

OCRT Means on the Pre and Posttests

	Pre	Posttest
Group A	17.21	17.13
Group B	18.88	20.16
Group C	18.00	19.48

decreased slightly for group A with 17.13.

The statistical hypothesis to be tested with the two way analysis of variance was:

there is no statistically significant interaction effect among the three groups and the OCRT pre- and posttest.

The obtained F-ratio 1.65 for the interaction among the three groups and the OCRT pre- and posttest is not significant at the 0.05 level. Thus, the statistical hypothesis, that the magnitude of the effects of the three groups is constant over all conditions of the OCRT pre- and posttest is not rejected.

The two way analysis of variance for the WCRT is summarized in Table 20. There is no statistically significant main effect among the three groups. Comparing the obtained means of the three groups shows that the means for group A 19.58, for group B 19.44 and for group C 19.52 are within a _very_ close range on the WCRT pretest. On the WCRT posttest the means for group A 18.38 and group C 18.28 are very similar but smaller than on the pretest. Only the written cognate recognition group B had a slightly higher mean 20.8 on the WCRT posttest with respect to 19.44 on the WCRT pretest. The variance for the WCRT posttest decreased for group A to 8.51 and group B to 11.08 but increased for group C to 9.46 relative to the variance on the pretest.

The lack of statistical significance among the three groups in the two way analysis seems to contradict the

Table 20

Summary of the Two Way Analysis of Variance

for the WCRT

Source of Variation	SS	DF	MS	F	p
Between Subjects	1203.11	73			
'A' Main Effects	45.93	2	22.97	1.41	0.25
Subjects Within Groups	1156.76	71	16.29		
Within Subjects	368.00	74			
'B' Main Effects	4.85	1	4.85	1.12	0.29
'A*B' Interaction	54.94	2	27.47	6.33	0.002**
'B' X Subj. Within Groups	308.15	71	4.34		

** p < 0.01

statistically significant main effect at the 0.004 level of the one way analysis of covariance for the WCRT posttest with the QSVT and WCRT pretests as covariates. However, the statistically significant difference in the one way analysis of covariance is explainable when the WCRT posttest means of the three groups are taken into consideration. Only the mean for group B, the written cognate recognition treatment group, improved relative to the WCRT pretest and stands out even more when comparing the mean 20.8 of group B with the WCRT posttest means for group A 18.38 and group C 18.28. It seems fortunate that the more difficult WCRT happened to be the posttest, otherwise improved performance on an easier WCRT posttest could have been confounded with the written cognate recognition treatment effect. There was no statistically significant main effect between the WCRT pre- and posttest.

The statistical hypothesis to be tested with the two-way analysis of variance was:

there is no statistically significant interaction effect among the three groups and the WCRT pre- and posttest.

A statistically significant interaction was found at the 0.002 level among the three groups and the WCRT pre- and posttest. However, the found interaction is likely an artifact which may be attributed to the relatively low correlation coefficient 0.54 of part I and part II of the WCRT. The statistical hypothesis that the magnitude of the effects of the three groups is constant over all conditions

on the WCRT pre- and posttest is not rejected. Only the written cognate recognition treatment group B with the lowest WCRT pretest mean of 19.44 improved on the WCRT posttest mean to 20.8. Group A and C have parallel performance on the WCRT posttest in that both group means decreased. The crossing of the lines in Figure 2 is reflected in the statistically significant interaction effect.

It should be noted that without any prior training in written cognate recognition the three group means on the WCRT pretest are within a much closer range 19.58, 19.44 and 19.52 than on the OCRT pretest where the group means are 17.21, 18.88 and 18.00, respectively. This observation supports the theoretical assumption of the investigator that written cognates, which share the graphemic, lexical and semantic realm in two vocabulary systems, are more uniformly identified than orally presented cognates which share the lexical and semantic realm but are more difficult to identify because of phonetic differences. In silently reading the WCRT the phonetic difference may not figure as predominantly as in the OCRT.

The two way analysis of variance for the QSVT is summarized in Table 21. There is no statistically significant main effect among the three groups although the obtained group means on the QSVT extend from 50.2 for group C, 53.13 for group A to 58.88 for group B. This finding is
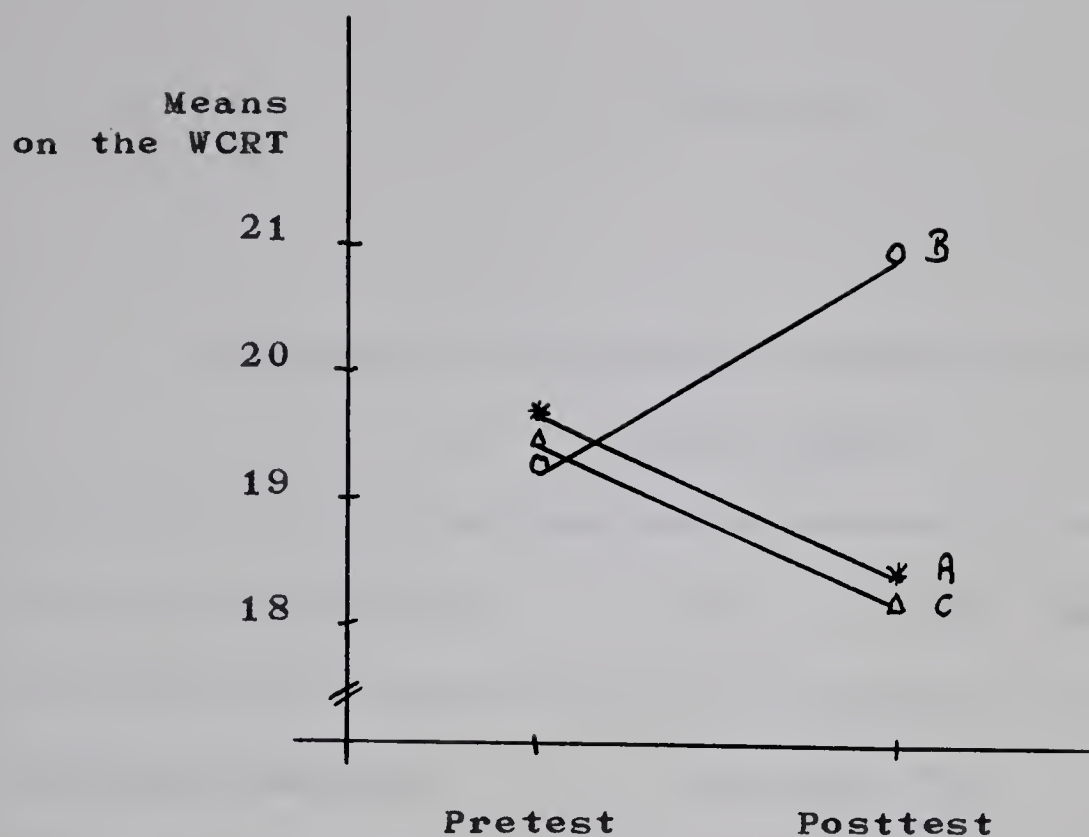
* Control group A
o Written cognate recognition group B
Δ Oral cognate recognition group C

Figure 2 Means on the WCRT Pre and Posttests for
Groups A, B and C

WCRT Means on the Pre and Posttests

	Pre	Posttest
Group A	19.58	18.38
Group B	19.44	20.80
Group C	19.52	18.28

in accordance with the result of the one way analysis of covariance of the QSVT posttest with the QSVT pretest as covariate summarized in Table C in Appendix D of this study. There was no statistically significant main effect in the one way analysis of covariance on the QSVT. In addition, there is no statistically significant main effect on the pretest versus the posttest. It may be noted in the graphical representation of the two way analysis for the QSVT (Figure 3) that statistical regression appears to be operating. Group C with the lowest mean shows a slight improvement on the QSVT posttest, whereas group A and B show a slight decrease. The statistical hypothesis to be tested with the two-way analysis of variance

> there is no statistically significant interaction
> effect among the three groups and the QSVT pre- and
> posttest

is failed to be rejected.

In summary, it was found in the present study that there is a statistically significant relationship between performance on the QSVT and the cognate tests. This finding supports Limper's study which tested student knowledge of some French-English cognates and found that the percentages of correct responses for these French-English cognates increased progressively from grade nine to first year college students. The possible utility of English-French cognates appears to require a relatively large English vocabulary.

* Control group A
O Written cognate recognition group B
Δ Oral cognate recognition group C
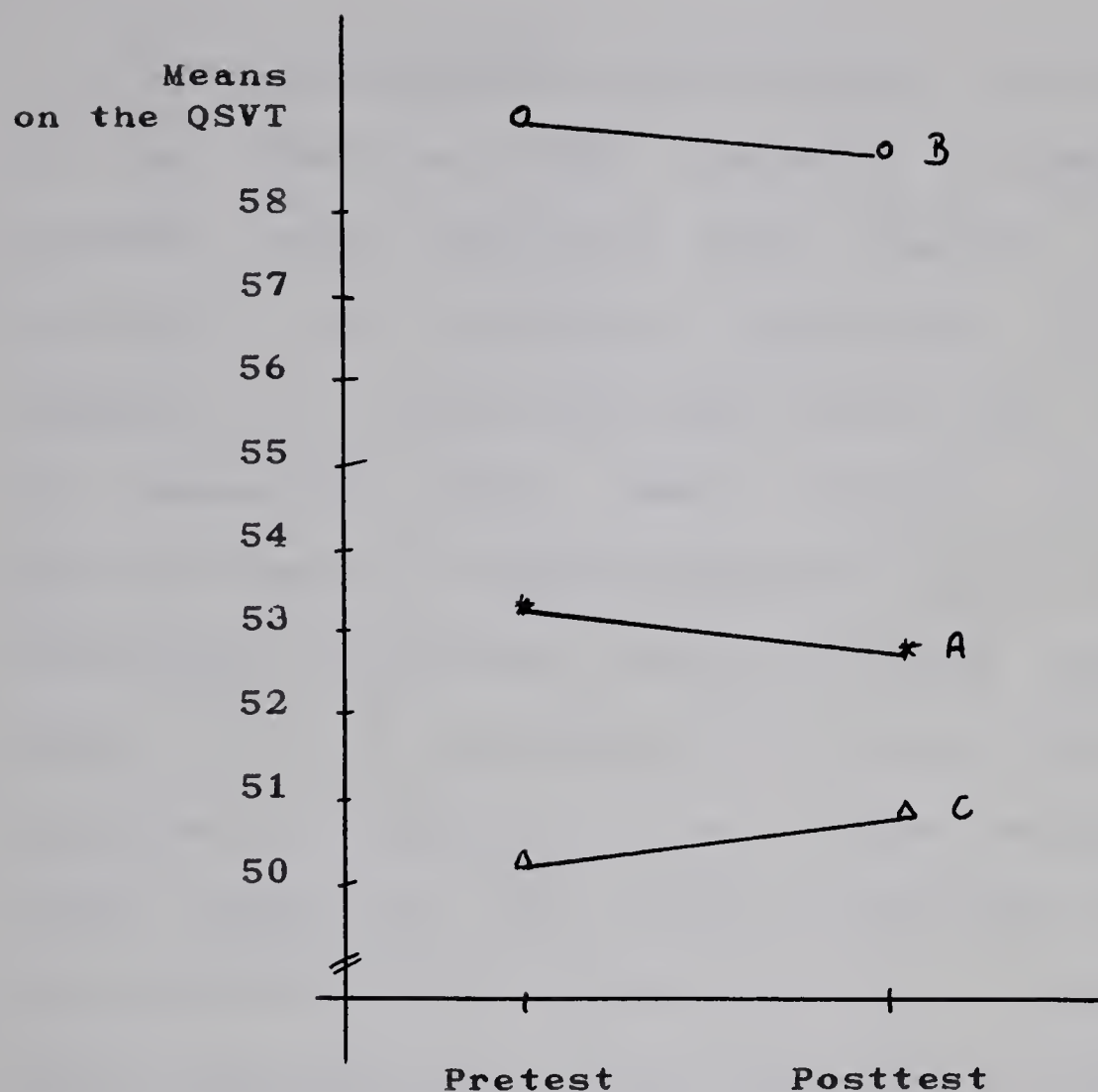
Figure 3 Means on the QSVT Pre and Posttests for
Groups A, B and C

QSVT Means on the Pre and Posttests

	Pre	Posttest
Group A	53.13	52.58
Group B	58.88	58.40
Group C	50.20	50.72

The statistically significantly improved performance on the OCRT and WCRT posttests in comparison with the control group indicates that students can learn the phonemic and spelling differences of English-French cognates in a relatively short time. Thus, the claims made by Chamberlin, Kern, West, Johnston and Anthony that English-German or English-Spanish cognates may be used as a vocabulary acquisition device in second language learning seems to be justifiable as well for English-French cognates. In addition, the written cognate recognition group showed not only a gain on the WCRT posttest but also on the OCRT posttest whereas the oral cognate recognition group improved only on the OCRT posttest. Since the two-way analysis of variance did not result in any statistically significant interaction effects the oral and written cognate treatments appear to be responsible for the posttest gains on the cognate tests.

After the experiment proper was completed, students in the oral and written cognate recognition groups were asked to evaluate the cognate teaching material. The same general questions were asked in the oral and written cognate evaluation questionnaires except for specific questions on the oral and written cognate teaching material. Both questionnaires are presented in Appendix E of this study. Twenty-one out of twenty-five students in the oral cognate recognition group C and twenty-three out of twenty-five students in the written cognate recognition group B

completed the questionnaires.

The first question was open-ended, students were asked to explain in what ways they thought that the use of cognates could aid their French study. The answers varied. Students felt that cognates enlarged their French vocabulary, or aided their comprehension or spelling ability. To cite a couple of comments:

> "You can understand the meaning of what's being said more clearly when you find some cognates. (since we think in English)"
> "I suppose that I might recognize French words from any knowledge of similar English ones -- also to realize the languages' progression through the centuries, etc. "

To assess whether the vocabulary items selected in the oral and written cognate teaching material were appropriate for grade 10, French 11 students, students were asked to indicate whether or not they learned any English-French cognate words of which they did not know the meaning in English. In the oral cognate recognition group sixty-seven per cent of the students indicated that they had learned English-French cognate words during the study of which they previously had not known the meaning in English. Students indicated that they had in this manner learned approximately five to fifteen English words. In the written cognate recognition group ninety per cent of the students indicated that they learned between three and twenty English-French cognate words of which they did not know the meaning in English. The remaining 10 per cent indicated

that they did not learn any new English words. The
different percentage for English vocabulary acquisition
with cognates for the oral and written cognate group may be
attributed to greater exposure to the language in the
written cognate teaching material.

Since oral and written cognate recognition practices
were separated in this study, students in both groups were
asked whether they thought cognates would be a) helpful
only in oral comprehension, b) helpful only in written
comprehension, c) helpful in both oral and written
comprehension and d) helpful in neither oral nor written
comprehension of French. Unanimously, students in both
groups expressed that English-French cognates could be
helpful in both oral and written comprehension ; but to the
question, "Having had practice with identifying oral
(written) cognates would you like to learn how to
understand written (oral) cognates as well?" seventy-five
per cent of the students in the oral cognate recognition
group indicated yes. Some students commented that orally
presented cognates are more difficult to understand than
their written counterparts and therefore, once orally
recognized, training in the written recognition of cognates
would not be necessary. In the written cognate recognition
group, students unanimously expressed they would like to
learn the oral recognition of cognates as well, but felt
that the oral recognition of cognates would be more
difficult.

To the question "In your opinion, how long should the study of cognates last?" the suggested number of lessons for the oral cognate teaching material ranged from two to twenty-five lessons with an average of seven lessons. For the written cognate teaching material the suggested number of lessons ranged from five to fifteen lessons with the majority of students, 62 per cent, indicating ten lessons. The difference in the average number of lessons suggested for the oral and written cognate teaching units may be explainable with respect to the amount of material covered. The written cognate recognition group was exposed to more material although some of the teaching material may have been familiar to the students.

Fifty per cent of the students in the oral cognate recognition group indicated that they thought the time lapses between the lessons were too long. Sixty-four per cent of the students in the written cognate recognition group expressed the same view. Some students suggested that the study of cognates should last throughout the school year because it was a great help.

The twenty-four cognate word-ending regularities and the ten example words followed by a short definition in French for sixteen cognate word-ending regularities were used in the oral and written cognate teaching material. The teaching material was rated according to students' likes or dislikes. Seventy-eight per cent of the students in the

oral cognate recognition group liked the study of the twenty-four cognate word-ending regularities as did ninety-six per cent of the students in the written cognate recognition group. The different percentages obtained for the oral and written cognate recognition groups may be due to the possible utility of applying these rules. Students in the written cognate recognition group had more opportunity to use the twenty-four cognate word-ending regularities to the French excerpts than students in the oral cognate recognition group to words. Only fifty per cent of the students in the oral cognate recognition group liked the lessons concerning the sixteen cognate word-ending regularities illustrated with ten example words in each in contrast to ninety per cent of those students in the written cognate recognition group. The students who expressed a dislike for the ten example words would have preferred to have had the definition in English.

Only fifty per cent of those students in the oral cognate recognition group liked the information about the French vocalic system. The remaining students disliked it because it was too difficult for them. The pre-recorded oral cognate practice wordlist was unanimously liked by students.

Seventy-one per cent of those students in the written cognate recognition group liked the review on the French noun, verb, adjective and adverb characteristics, 29 per

cent of the students wrote that they found it difficult and did not understand the grammar lesson. Sixty-two per cent of the students liked studying the meaning of English-French cognate suffixes , 38 per cent did not like it. Students also rated the five French excerpts according to difficulty and interest. Fifty-seven per cent of the students found "La Renaissance italienne" and "La Pollution" easy, and 43 per cent of normal difficulty. Eighty-one per cent of the students rated "L'Empire Inca" and "Les Dinosaures" of normal difficulty, 10 per cent found it easy and 9 per cent difficult. "L'Avenir de L'Amérique Centrale" was rated difficult by 48 per cent and 52 per cent as of normal difficulty. "L'Empire Inca" received the highest rating as being most interesting, in second place came "La Renaissance italienne", "le Dinosaures" and "la pollution" were in third position and "l'avenir de l'Amérique centrale" was rated least interesting.

To the question "Have you tried to apply your knowledge about cognates to a) listening to the French radio station, b) the French television and c) French tapes, students in the oral cognate recognition group responded as follows: Nine per cent of the students indicated that they listened to the French radio station, 27 per cent of the students watched the French television station and 23 per cent of the students listened to French tapes outside their regular French classes. In the written

cognate recognition group the question was asked "Have you tried to apply your knowledge of cognates to a) reading a French newspaper, b) a French magazine and c) a French book?" Not one of the students read a French newspaper outside of class, 16 per cent of the students read a French magazine and 96 per cent a French book. Students' responses concerning the application of cognates in situations other than their regular French classes may be interpreted as a good indication that English-French cognates could serve as a motivating force in the study of French.

In the final chapter a summary, the implications of the study and suggestions for further research will be presented.

Chapter V

Summary, Implications and Further Research

Summary

The aim of this study was to find out whether or not
students can employ English-French cognates in listening
and reading comprehension of French by being taught the
phonemic differences and the spelling alterations
influencing English-French cognates. Two approaches were
devised, namely 1) phonetic training for the oral
recognition of cognates and 2) vocabulary acquisition
techniques in the written recognition of cognates. The
results were analyzed to discover whether or not English-
French cognates could be used as a vocabulary acquisition
device in the oral and written comprehension of French by
Anglophones.

Three classes of grade 10, French 11 students were
randomly assigned to one of the three possible conditions
control, oral cognate recognition and written cognate
recognition. The students were given three pre- and
posttests. The Quick-Scoring Vocabulary test Grades IX to
XIII was administered form A as the pretest and form B as
the posttest. An oral cognate recognition word test and a
written cognate recognition sentence test, both developed

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by the investigator were also administered. Part I of each test was used as a pretest and part II of each test was used as a posttest. Students in the oral cognate recognition group were taught the phonemic differences of English-French cognates and students in the written cognate recognition group were taught the spelling alterations of English-French cognates by their regular classroom teacher. Students in the control group received no treatment. Three intact classes were used. A total of 74 students participated in the experiment.

Intercorrelations among the QSVT, OCRT and WCRT pre- and posttest were calculated in order to determine the relationships among the English vocabulary test (QSVT) and the cognate tests (OCRT and WCRT). One way analyses of covariance were carried out to determine any statistically significant difference of group means on the cognate posttests for the three groups. Two-way analysis of variance was carried out to determine any interaction effects for the three groups and the three pre- and posttests.

The usefulness of English-French cognates in French second language learning was found to depend to a certain degree on the student's English vocabulary power. Significant correlations were found for the QSVT and the cognate pre- and posttests with one exception. For group B with the highest mean on the QSVT no statistically

significant correlation was found for the QSVT with the WCRT posttest. This finding may be attributed to the complex nature of the task in the WCRT. The WCRT does not only measure vocabulary, but the comprehension of syntax. Cognate recognition may be one aspect in the response. However, unfamiliarity with the syntactical structure of the sentence may prevent comprehension of the sentence although the lexical items are known by the students.

The one-way analyses of covariance yielded statistically significant results. The oral cognate recognition group C improved statistically significantly on the OCRT posttest after the treatment, as did the written cognate recognition group B when compared to the control group. The two-way analysis of variance did not reveal a statistically significant interaction effect among the three groups and the OCRT pre- and posttest. The disordinal interaction effect found on the WCRT is likely an artifact of the less than perfect correlation between part I and part II of the WCRT.

The findings suggest the need for a relatively large English vocabulary knowledge by students who study French in order to employ cognates to facilitate oral and written comprehension of French. It appears that the phonemic and spelling differences of English-French cognates can be learned in a relatively short time period. Teaching students the written recognition of cognates also tends to

improve the students' oral recognition of cognates. The reverse transfer effect from the oral recognition of cognates to reading recognition and comprehension of cognates was not found.

Since three intact classes were used in this experiment, that is, the sample was not randomly selected, generalizability is limited because the sample is the experimentally accessible population. However, the sample may not differ appreciably with respect to age, sex and possibly IQ and socioeconomic level of the parents from the larger population of students in the same grade 10, French 11. Cornfield and Tukey (1956) advocate generalization from the sample to a population "like those observed".

Implications

The results of the present study indicate that students can be taught the phonemic and spelling differences of English-French cognates in a relatively short time. Therefore teachers should consider the use of English-French cognates in their French as a second language class at the grade 10, French 11 level. Moreover, students in the oral and written cognate recognition treatment groups unanimously agreed in the evaluation questionnaire that cognates could aid their French study. A few comments students made were:

"Cognates are a great asset to the French program in such a way that they helped you to understand more words and also just to learn many more words in French that you don't happen to come across in an ordinary French class."

"Cognates helped to see the relationship between French and English and learning or knowing words in one language would increase vocabulary in both languages."

"I feel cognates would broaden my French vocabulary in less amount of time, then learning them as they are taught in <u>Voix et Images de France</u>."

The investigator expected a transfer effect between the oral and written cognate recognition treatment groups since the teaching material overlapped. For example, the information on Day I including the definition of cognates with the 24 cognate word-ending regularities and the 16 cognate word-ending regularities with the ten example words, chosen for the experimental treatment, were presented to both groups. For the WCRT treatment group the transfer to the OCRT proved statistically significant, but there was no statistically significant transfer from the OCRT to the WCRT. Students remarked in their evaluation of the cognate teaching material that their knowledge of the cognate word-ending regularities aided their spelling ability in French, which could partly explain the observed transfer. Another possible explanation could be, as Bazan, concerning the use of the written word, hypothesizes, " ... the written word could act as a reinforcer of the utterance heard, since the written symbols might be more familiar to the literate learner than the foreign utterance" (Bazan, 1964: 343). It should be added that this is, in particular,

applicable to languages which share the same graphemic symbols. The more sense modalities are involved in learning a new stimulus or a new vocabulary, the greater the chance may be for memorization. In the written cognate recognition treatment group, the students read, spoke and heard the words. In the oral cognate recognition treatment group, listening and speaking were involved.

In agreement with other research findings (Lipton, 1969; and Finstein, 1972)), the present study showed that the study of the written language had a positive effect upon oral comprehension. With the limited time available to French second language teaching, the emphasis on written cognate recognition may result in the most economic and efficient use of cognates.

The oral cognate teaching material was judged by the investigator as containing the necessary phonetic instruction to facilitate the oral recognition of English-French cognate words at the grade 10, French 11 level. Students with a minimum of three years of French instruction are accustomed to French pronunciation whether they received systematic phonetic instruction of sounds and clusters of sounds or assimilated the correct pronunciation through imitation of the model on the magnetic tape and of the teacher. Only those phonemes which are different in the English and French languages, and thus complicate oral comprehension of cognates were taught. For example, the

French nasal vowels in the word "intelligence" could complicate the understanding of this cognate.

In the oral practice cognate wordlist, students were asked to distinguish the slight alterations due to French pronunciation of the English cognates so as to detect the corresponding English equivalent. The review and study of the French alphabet and French vocalic system provided the students with the necessary phonetic knowledge to pronounce each of the ten example words of the sixteen cognate word-ending regularities in French. Unanimously, students enjoyed the recognition exercises of the oral practice cognate wordlist whereas only fifty per cent of the students enjoyed learning the phonetic information about the French vocalic system. The study of the vocalic system was possibly more abstract and more difficult for students than the oral practice cognate wordlist. However, since application of the phonetic information to the ten example words of the sixteen cognate word-ending regularities was required, students needed this information.

The possible advantages of the oral practice cognate wordlist are: 1) this exercise was judged to be relatively easy and liked by the students, and 2) priority was placed on careful listening to the phonemes as well as on meaning. The possible disadvantages of the oral practice cognate wordlist are: 1) French intonation and rhythm are neglected, 2) isolated words are used out of context, and

3. A longitudinal study could be conducted with selected English-French cognates to ascertain at which grade level the use of cognates would be most useful to students. Since English vocabulary power of students differs and English-French cognates are useful only to the extent that the student knows their meanings in English, the selection of English-French cognates for different grade levels would be of paramount importance. An English vocabulary test like the QSVT could be used to predict the possible benefit students could derive from the study of cognates.

4. The oral cognate teaching material is essentially a condensed phonetic course specifically geared to the phonetic differences of English-French cognate words. Mastery of this material could be regarded as the first step towards oral comprehension of natural speech. The oral cognate teaching unit could be extended to include sentences incorporating French rhythm, intonation and pitch and perhaps longer oral excerpts.

5. In this study the emphasis in the written cognate recognition teaching unit was placed upon the use of cognates as a vocabulary acquisition device, but the instruction of French syntactic structure and of the French verb and tense system should be included in the written cognate teaching unit. Syntactical awareness should be taught so that students can organize speech into meaningful

practicing cognate recognition. Similarly, the lecture method was an appropriate way to cover the amount of material in a short time. However, this is not the only possible alternative. The cognate teaching material could be presented in such a way that students themselves could be lead to discover the existence and properties of cognates.

For Further Research

On the basis of what has been done and discovered in the present study regarding the use of English-French cognates in listening and reading comprehension of French, the investigator suggests the following points for further investigation.

1. For any statistical study, replication of the experiment is always advisable to substantiate or disconfirm the findings reported in the study. Replication of the study with a larger sample and different teachers would be recommended.

2. It would be worthwhile to include a delayed posttest to determine whether the observed gains for the oral and written cognate recognition groups persist over a longer period of time. A delayed posttest was not included in this study because the experiment took place close to the end of the school year.

teaching material as presented in Appendix A of this study.

Some students thought that the distribution of the six oral and written cognate lessons over a six week period was not intense enough. Their main argument was that they had the impression of forgetting what had already been covered. However the results obtained on the cognate posttests for the oral and written cognate recognition groups does not support this argument. The cognate teaching material is not intended to replace any of the French second language programs used in the schools but as a device for vocabulary enrichment and variety. Devoting some time to cognates would constitute a break in routine from the regular French method used. For the oral cognate teaching material, ten to fifteen minutes instead of thirty minutes of phonetic instruction could be tried as an alternative. A similar length of time could be devoted to the study of written cognates.

The heavy reliance on handouts and lecture presentation in this study was partly due to the relatively limited length of time allotted to the experiment. The handouts were judged to be valueable for two reasons, 1) students who missed a lesson were able to obtain the handout and do the exercise and 2) students were not required to memorize the 24 cognate word-ending regularities or the most frequent deceptive cognates, but were able to use the handouts as reference material when

cognates last", indicated a range from two to twenty-five lessons with a mean of seven lessons. The investigator cannot suggest an optimum length for the teaching of the oral recognition of cognates on the basis of the short duration of the present study. The students' previous French instruction which ranged from a minimum of four to a maximum of eight years in the oral cognate group C, their ability levels and motivational factors have to be taken into consideration in order to determine the appropriate length for the teaching of oral cognates.

The suggestions from students on how long the study of written cognates should last ranged from five to fifteen lessons with the majority of students, 62 per cent, indicating that ten lessons would be appropriate. Some students expressed that the study of cognates should last throughout the school year because it was a great help. For some students some of the lesson material on the meaning of suffixes, the French noun, verb, adjective and adverb characteristics and the use of context clues to guess the meaning of an unfamiliar word may have been a review and for some students was not found too difficult, but not for others. The investigator concurs with the suggestions of some of the students that ten instead of six lessons would have been appropriate in the present study. The teacher would have to judge, on the basis of his students' ability, the optimum number of lesson needed to teach the written cognate material, if he or she would like to use the

students recognize cognates and their meanings in English cognates could be used in individualized French instruction. Instead of assigning the same excerpt to every student in the class, a selection could be made according to the students' ability and interest. As the students progress in their study of cognates, they could choose their own reading materials and present orally what they have read to the class.

In this study the oral and written recognition of cognates was separated. However, in French second language teaching, the phonemic and the spelling differences of English-French cognates should be combined. Unanimously, students in the written cognate recognition group expressed in the questionnaire that they would have liked to study both the oral and written comprehension of English-French cognates. However many students commented that oral cognates would be more difficult to understand than their written counterparts. To cite one student's comment, "Once a cognate is recognized orally, then it would also be recognized as a written word. Many cognates are easier to recognize as written because of the pronunciation differences."

With the amount of material presented in the oral cognate teaching unit, six thirty-minute lessons were judged appropriate. However students' response to the questionnaire question "How long should the study of oral

used in the analysis of French syntactical structures found
in the excerpts. Cognates could also be used in pattern
drills, starting out with syntactical similarities of
English and French. For example,
"Marie a le livre." Mary has the book.
"Où est l'enfant qui était malade?" Where is the child who
was sick?

The students' ratings of the five French excerpts
according to difficulty were in accordance with the order
of presenting the excerpts: "La Renaissance italienne", "La
Pollution", "L'Empire Inca", "Les Dinosaures" and "L'Avenir
de l'Amérique centrale". However, as the questionnaire
results show, students found different excerpts
interesting: "L'Empire Inca" received the highest rating as
being most interesting, followed by "La Renaissance
italienne". "Les Dinosaures" and "La Pollution" were in
third position and "L'Avenir de l'Amérique centrale" was
rated as the least interesting. The teacher would of course
be free to choose the excerpts in which he or she thought
the students would be interested and which would be within
the students' competence. Mechanical manuals, books,
articles, magazines and newspapers could be valuable
sources for reading material.

When introducing a cognate unit the investigator would
suggest that high cognate density excerpts would be
appropriate to practice recognition of cognates. Once

Sixty-two percent of the students found the meaning of some English-French cognate suffixes useful, thirty-eight per cent of the students did not. One student wrote, "The meaning of suffixes like "-phone, -phile, -scope, etc." is not as common and can't be used as often, I think."

The knowledge of the meaning of some suffixes, the French noun, verb, adjective and adverb characteristics and the use of context clues to guess the meaning of an unfamiliar word overlap to some extent with English language instruction. However, since students differ with regard to knowledge of grammar and how to use context clues this material has to be explained for some students in greater length and depth in the French class. The importance of good English language instruction in grammar and vocabulary development cannot be overemphasized.

French syntactical structures were not taught in the written cognate recognition group because emphasis in the present experiment lay on cognates as a vocabulary acquisition device. However, the study of syntactical structures of the French language as well as the verb and tense system of the French language is necessary to facilitate reading comprehension. This became evident in the intercorrelation of the QSVT and the WCRT posttest where no statistically significant correlation was found for group B on the QSVT and WCRT posttest. English-French cognates recognized and understood by students could be

The ten example words and definitions for the sixteen cognate word-ending regularities were a simple extension of the 24 cognate word-ending regularity list, providing more illustrations and serving as a vocabulary acquisition device for isolated words for the written cognate recognition group B and as a pronunciation exercise for the oral cognate recognition group C. Seventy per cent of the students enjoyed these exercises. However, thirty per cent of the students would have preferred to have had the definition in English. Perhaps if the student does not know the cognate word in English, an explanation in English would be appropriate.

The review of the French noun, verb, adjective and adverb was included in the written cognate recognition teaching material because the recognition of cognates was practiced with French excerpts, that is, vocabularies used in context. In addition, the 24 cognate word-ending regularities were classified according to parts of speech. While verifying the comprehension of the excerpts it was found that although students recognized cognates, some students did not know the part of speech of the cognate word and were therefore unable to derive a meaningful interpretation of the sentence. Seventy-one per cent of the students liked the review of the French noun, verb, adjective and adverb characteristics, but twenty-nine per cent of the students wrote that they found it difficult and did not understand the grammar lesson.

3) the exercise requires translation.

Unfortunately, it is not possible to assess exactly to what extent either the phonetic instruction or the oral practice cognate wordlist is responsible for the improved performance on the OCRT posttest for the oral cognate recognition treatment group C. The written cognate recognition group B, which received no phonetic instruction also improved on the OCRT posttest. From this finding it may be inferred that phonetic instruction may not be as important as the oral practice cognate wordlist for the performance on the OCRT, but may be required if students want to use English cognates to communicate in French.

The investigator judges the lesson material of day I including the definition of cognates, the 24 cognate word-ending regularities and some examples of deceptive cognates as essential for the teaching of cognate recognition. Eighty-five percent of the students in the oral and written cognate recognition groups found the 24 cognate word-ending regularities useful for oral and written recognition of cognates. Students made the following comments:

> "These 24 cognate word-ending regularities made it a lot easier to pick out cognates."
> "It was really informative the way it was set up. The people not too good in French could understand it as well as the better people, and the better people didn't get bored."
> "This was perhaps the most important part of the material but I think it is better if the student discovers these things (the cognate word-ending regularities) by him- or herself."

units. It would be interesting to study the possibilities of these additions.

6. The oral cognate recognition test could be modified so that translational skills would not be measured to such a great extent.

7. Since as yet the research concerning the use of cognates in teaching French as a second language is very limited, the investigator hypothesizes that English-French cognates would have the greatest possible facilitation effect for passive language skills, that is, reading and listening. The active use of cognates in speaking and writing may be more complicated than their passive use in listening and reading comprehension. Recall not recognition of cognates is a criterion in speaking and writing. The danger of making up words would be more likely in the active use of cognates. A greater amount of phonetic instruction could be required for the oral use of English-French cognates in speaking to counteract the habit of pronouncing the cognate in the dominant language. Bazan writes: "... the written word, due to the literate condition of the learner, might lead irrevocably to the incorrect phonological interpretation" (Bazan, 1964 : 343). Further research is required to determine the usefulness of cognate training in the active language skills.

8. Further research is needed to determine the usefulness of English-French cognates for Francophones who

study English as a second language.

study English as a second language.

Bibliography

Anthony, E. M. The Teaching of Cognates. Language Learning
, IV , (1952 - 53), 79 - 82.

Ausubel, D.P. Learning Theory and Classroom Practice . The
    Ontario Institute for Studies in Education, Bulletin
    No. 1, 1967.

Bazan, B.M. The Danger of Assumption Without Proof. Modern
    Language Journal , 48 , 1964, 337 - 346.

Boillot, F. Le Second Vrai Ami du Traducteur . (anglais-
    fran,ais et français-anglais), Editions J. Oliven,
    Paris, 1956.

Braun-Lamesch, M.-M. Le rôle du contexte dans la
    compréhension du langage chez l'enfant. Psychologie
    Fran,aise , VII , No. 3, July 1962, 180 - 189.

Campbell, D.T., and Stanley, J.C. Experimental and Quasi-
    Experimental Designs for Research . Rand McNally
    College Publishing Company, Chicago, 1973.

Chamberlin, W.A. The Comparative Study of Words in Foreign
    Languages. The School Review , XIII , January-December
    1905, 315 - 323.

Chapman, F.L., and Gilbert, L.C. A Study of the Influence
    of Familiarity with English Words upon the Learning of
    Their Foreign Language Equivalents. Journal of
    Educational Psychology , 28 , November 1937, 621 -
    628.

Chomsky, N. Language and Mind . New York, Harcourt Brace
    Jovanovich, 1972.

Cor, L.W. Humanizing Language Study. The French Review , 40
    , May 1967, 817 - 822.

Cornfield, J., and Tukey, J.W. Average Values of Mean
    Squares in Factorials. The Annals of Mathematical

Statistics , _27_ , December, 1956, 907 - 949.

Dale, E., and Razik, T. _Bibliography of Vocabulary Studies_ . Second Revised Edition 1963, Bureau of Educational Research and Service, The Ohio State University, Columbus, Ohio, 1963.

Dale, E., Razik, T., and Petty, W. _Bibliography of Vocabulary Studies._ Third Revised Edition, The Ohio State University, Columbus, Ohio, 1973.

Dashwood, J. D. _Patterns for Writing_ . W.J. Cage Limited, Toronto, 1966.

Debyser, F. Comparaison et interférence lexicales. _Le Français dans le Monde_ , Nos. 78-85, Juin 1971, 51 - 57.

Deighton, L. C. _Vocabulary Development in the Classroom_ . Published by Bureau of Publications, Teachers College, Columbia University, 1959.

Delattre, P. _Comparing the Phonetic Features of English, French, German and Spanish : An Interrim Report_ . Julius Groos Verlag, Heidelberg, 1965.

Derocquigny, J. _Autres Mots Anglais Perfides_ . Vuibert, Paris, 1931.

Dubois, J. _Etude sur la dérivation suffixale en français moderne et contemporain, essai d'interprétation des mouvements observés dans le domaine de la morphologie des mots construits._ Paris, Larousse, 1962.

Dubois, M.-M. _Dictionaire Moderne Français-Anglais._ Librairie Larousse, Paris, 1960.

Eichler, J. The Effects of Cognate Usage on Foreign Language Speaking Proficiency. Ph. D. Thesis, University of Wyoming, 1972.

Eoff, S. H., and Bull, W.E. Semantic Approach to the Teaching of Foreign Languages. _Modern Language Journal_

, January, 1948, 32 , 3 - 13.

Epstein, W. A Further Study on the Influence of Syntactical
    Structure on Learning. American Journal of Pschology ,
    LXXV , No. 1, March 1962, 121 - 126.

Ferguson, G. A. Statistical Analysis in Psychology and
    Education , Third Edition, McGraw-Hill Book Company,
    New York, 1971.

Finstein, M. W. French for Reading Knowledge -- An Option.
    French Review , 45 , No. 2, March 1972, 838 - 841.

Le Fran,ais Fondamental, (Premier Degré). Institut
    Pédagogique National, Ministère de l'Education
    Nationale Direction de la Coopération, Paris.

Fries, C. C. Teaching and Learning English as a Foreign
    Language . The University of Michigan Press, Ann
    Arbor, 1945.

Gagné, R. M. The Conditions of Learning. Holt, Rinehart and
    Winston, Inc. New York, 1967.

Galland, J. S. A Study of the Structural Elements of the
    French Language. Modern Language Journal , 25 , March,
    1941, 477 - 487.

Gougenheim, G. Les Mots Fran,ais dans l'histoire et dans la
    vie. Vol. 1, Paris, Picard, 1968.

Greene, E. J. H., Faucher, M., Healy, D. M. Reflex French.
    MacMillan of Canada, Toronto, 1966.

Grittner, F. M. Teaching Foreign Languages. New York,
    Harper and Row, Publishers, 1969.

Gulliksen, H. Theory of Mental Tests . Wiley, New York,
    1950.

Gumperz, J. J. On the Linguistic Markers of Bilingual
    Communication. Journal of Social Issues , XXII , No.

2, 1967.

Hamers, J.F., and Lambert, W.E. Bilinguals' Reaction to Cross-Language Semantic Ambiguity. published in Bilingualism, Biculturalism and Education. Proceedings from the Conference at Collège Universitaire Saint-Jean . The University of Alberta, Edmonton, Edited by S. T. Carey, June 1974.

Hammer, C. J. Stress the German-English Cognates! The Modern Language Journal , 41 , No. 4, April 1957, 177 - 182.

Hartwig, R. J. Teaching French Vocabulary. The French Review , 47 , No. 4, March 1974, 720 - 726.

Hoffmann, L.-F. L'essentiel de la grammaire française . Deuxième Edition. The Scribner French Series, New York, 1973.

Holley, F. M. A Study of Vocabulary Learning in Context. The Foreign Language Annals , 6 , No. 3, 1973, 339 - 347.

Ianco-Worrall, A. D. Bilingualism and Cognitive Development. Child Development , 43 , 1972, 1390 - 1400.

Johnston, M. C. Cognate Relationships Between English and Spanish Vocabularies as a Basis for Instruction. Ph.D. Thesis, The University of Texas at Austin, 1939.

Kist, J., C. Analysis and Critique of a Major Curriculum Study: La Commission du Fran.ais Fondamental. Chilton Company, Book Division, New York, 1962.

Kern, P. O. The Study of Cognates as an Aid in the Acquisition of a Vocabulary. The School Review , XVI , 1908, 109 - 112.

Koessler, M., and Derocquigny, J. Les Faux Amis. Librairie Vuibert, Paris, 1946.

Kolers, P. A. Reading and Talking Bilingually. American Journal of Psychology , 79 , 1966, 357 - 376.

Kucera, H., and Francis, N.W. Computational Analysis of Present-day American English . Providence, Brown University Press, 1967.

Lado, R. Linguistics Across Cultures -- Applied Linguistics for Language Teachers. The University of Michigan Press, Ann Arbor, 1960.

------, Language Testing: the Construction and Use of Foreign Language Tests; a Teacher's Book . Longmans, London, 1964.

Lebrun, A. La phonétique rendue facile . Edition de Rodage, Montréal, 1966.

Limper, L. H. Student Knowledge of Some French-English Cognates. The French Review , VI , 1932-33, 37 - 49.

Lipton, G. C. To Read or Not to Read : An Experiment on the FLES Level. Foreign Language Annals , 3 , No. 2, December 1969, 241 - 246.

Lovell, G. D. Interrelations of Vocabulary Skills: Commonest Versus Multiple Meanings. Journal of Educational Psychology , 32 , 1941, 67 -82.

Mackey, W.F. Le Vocabulaire disponible du français. Marcel Didier (Canada) Ltée. Montréal, 1971.

------, Bilingual Interference: Its Analysis and Measurement. Journal of Communication , 15 , 1965, 239 - 249.

------, Principes de Didactique Analytique. Librairie Marcel Didier, Paris, 1972.

Macnamara, J. The Bilingual's Linguistic Performance: A Psychological Overview. The Journal of Social Issues , Vol. XXIII, No. 2, April 1967, pp. 58 - 77.

Miller, G. A. Some Pschological Studies of Grammar. *American Pschologist* , *XVII* , No. 11, November 1962, 748 - 762.

A *Million Random Digits with 100,000 Normal Deviates.* by The Rand Corporation, The Free Press Publishers, Glencoe, Illinois, 1955.

Monod, P. A.R. French Vowels vs. English Vowels. *The French Review* , *XLV* , No. 1, October, 1971, 88 - 95.

Nunn, M. E., and Van Scroy, H. A. *Glossary of Related Spanish English Words.* The University of Alabama Studies No. 5, University of Alabama, 1949.

Oppenheim, A. N. *Questionnaire Design and Attitude Measurement* . Basic Books, Inc., Publishers, New York, 1966.

O'Rourke, J. P. *Toward a Science of Vocabulary Development.* Monton and Co., N.V., Publishers, The Hague, 1974.

Rivers, W. M. ... Nos étudiants veulent la parole. *Le Fran.ais dans le Monde,* No. 94, Janvier-Février 1973, 23 - 30.

Robert, P. *Le Petit Robert, Dictionnaire de la langue fran.aise* , Publ. Alain Rey, Paris, 1972.

Ross, L. The Use of International Words as Phonetic Exercises with Particular Reference to Self-Instructional Language Laboratory Courses. *The Audio-Visual Language Journal* , *10-11* , Spring 1973, 25 - 28.

Savard, J.-G., and Richards, J. *Les indices d'utilité du vocabulaire fondamental fran.ais.* Les Presses de l'Université Laval, Québec, 1970.

Seashore, R.H., and Eckerson, L.D. The Measurement of Individual Differences in General English Vocabularies. *Journal of Educational Psychology* , *31* , January 1940, 14 - 38.

Seward, R. D. Dictionary of French Deceptive Cognates. Bates College, S.F. Vanni, New York, 1947.

Tentative Curriculum Guide for French as a Second Language, Province of Alberta, Department of Education , 1974.

Thorndike, E. L. The Teachers' Word Book. New York, Teachers' College, Columbia University, 1927.

Tomatis, A. L'Oreille et le langage. Le Rayon de la Science, Paris, Editions du Seuil, 1963.

Valette, R. M. Modern Language Testing . Harcourt, Brace and World, Inc., New York, 1967.

Vander Beke, G. E. French Word Book. Publications of the American and Canadian Committees on Modern Languages, XV , New York, Macmillan, 1929.

Vygotsky, L.S. Thought and Language. The M.I.T. Press, Cambridge, Massachusetts, 1972.

Weiman, R. Living Language Conversation Manual -- French. Crown Publishers, Inc., New York, 1955.

Weinreich, U. Languages in Contact. Findings and Problems. Publications of the Linguistic Circle of New York -- Number 1, New York, 1953.

Weintraub, S. Development of Meaning Vocabulary in Reading. Reading Teacher , 22 , November 1968, 171 - 175.

West, M.P. Note on the Inferability of Cognates. High Points , 16 , November 1934, 23 - 25.

Wiens, G. Anschaulichkeit in the Teaching of Languages. Modern Language Journal , 32 , January 1948, 14 - 19.

Wilkins, D.A. Linguistics in Language Teaching. Edward Arnold (publishers) Ltd., London, 1972.

Winitz, H., and Reeds, J. A. Rapid Aquisition of a Foreign Language (German) by the Avoidance of Speaking. _International Review of Applied Linguistics_ , _XI_ , No. 4, November 1973.

Appendix A

Experimental Treatment for the Oral and Written
Recognition of Cognates

Day I is the same for both experimental groups. The objective of the lesson is to acquaint students with a comparison of the English and French vocabulary systems, the definition of cognates and the most frequent deceptive cognates contained in Le Français Fondamental, Premier Degré .

The teacher presents the comparison of the English and French vocabulary systems as a lecture.

Comparison of the English and French
Vocabulary Systems

The comparison of the two vocabulary systems of the English and French languages is based upon the similarity to and difference from the native language. Comparing the French vocabulary with that of the English we will find words that are:

1. similar or identical in spelling and in meaning. These words are called cognates.

2. There are words which have the same spelling in the two languages but different meanings. For example the English word "coin" refers to money but the French word "coin" means corner. These words are called deceptive cognates.

3. Then there are words which are similar in meaning but are spelled differently in the two languages . For example "tree" in English is "arbre" in French.

4. There are words which are different in spelling and in meaning in the two languages . For example "le concierge" in France has no exact counterpart in English because we do not have door-keepers in our apartments.

5. There are words which are different in their type of constructions. For example, for a person studying English as a second language the two-word verbs are very difficult to learn. eg. to call up = to telephone, to call on = to visit.

6. A special difficulty group is represented by the words that are harmless in connotation in the native language but offensive or taboo in the second language or vice versa. For example, the French word "pue" meaning "stink" is not used by French speakers. They say "ça sent mauvais" but do not use "pue".

7. Finally some words are used and understood only within a particular geographical region. Dialects fall into this category.

Students receive a handout containing the definition of cognates and a list of the most frequent deceptive cognates, contained in Le Fran,ais Fondamental, Premier Degré . They are encouraged to refer to this material when they practice the recognition of cognates with the French excerpts.

The teacher gives a verbal explanation of each rule concerning the cognate word-ending regularities.

Definition of Cognates

The word "cognate" is derived from the Latin cognatus , meaning "born together, kindred, related, from the same stock". Applied to words, it refers to those having the same root or some derivation in common. The term cognate is also loosely applied to words borrowed in two or more languages from the same source, as, for example, "edelweiss" in English and French from the German "Edelweiss", meaning a special type of flower.

Cognates

Cognates are words in two or more languages that are similar or identical in spelling and meaning, disregarding accent marks. Loanwords, or words which have been adopted by one language from another, will be called cognates if

they are similar in spelling and meaning. For example English and French both adopted the word "malaria" from the Italian language. Similarly, if two words have the same origin but are now so different that speakers of the two languages do not identify them as similar, they will not be considered cognates for our purposes. For example, the English word " fish" and the French word "poisson" are both derived from the Latin word "piscis". They are cognates in the sense that they both share the Latin origin. However, "fish" and "poisson" are now so different that speakers of the two languages do not readily identify them as cognates. The term "similar" is restricted here to include items that would function as "same" in both languages in ordinary use. Similar in form refers either to a change of one letter in the spelling of the French and English word, for example, oncle = uncle, avantage = advantage, or to the following regularities if the spelling of the English and French words are otherwise the same:

1. French -té   = English -ty

   nécessité   necessity

   qualité   quality

   All 350 abstract nouns are feminine.

2. French -ie   = English - y

   comédie   comedy

   industrie   industry

   680 nouns in "-ie" are feminine.

3. French -tie   = English -cy

démocratie	democracy
diplomatie	diplomacy

4. French -nce = English -ncy

tendance	tendency

5. French -iste = English -ist

journaliste	journalist
artiste	artist

6. French -et = English -ect

effet	effect
objet	object

7. French - (^) = English - omitted s

forêt	forest
hôpital	hospital

8. French -aire = English -ary

anniversaire	anniversary
militaire	military

9. French es = English -initial s-

estomac	stomach
espace	space

10. French -ès = English -ess

progrès	progress
succès	success

11. French -eur = English -or (or) -er

acteur	actor
docteur	doctor
employeur	employer

12. French -oire = English -ory

gloire	glory
histoire	history

13. French -isme = English -ism

communisme communism

The "-isme" noun ending is always masculine.

14. French -cien = English -cian

électricien electrician

The "-cien" is a masculine ending.

15. French -re = English -er

mètre meter

centre center

16. French -er = English -drop er or r

commander command

commencer commence

17. French -ier = English -y

varier vary

18. French é = English -initial s

étrange strange

19. French -ique = English -ic

classique classic

domestique domestic

20. French -tif, ive = English -ive

collectif collective

21. French -eux, euse = English -ous

curieux curious

22. French -tiel, elle = English -tial

confidentiel confidential

23. French -é   = English -ed

    disposé   disposed

    sacré   sacred

24. French -ment   = English -ly

    naturellement   naturally

    certainement   certainly

In the present cognate list developed by the author there are approximately 11,000 cognates which the English and French languages share. This large body of common vocabulary is due to 1) the use of Latin and Greek prefixes and suffixes in the English and French languages, 2) the Norman Conquest in 1066, which enriched the English language with many French words, 3) lexical borrowings from other languages, and 4) the terminology of modern technology.

Partial Cognates

Most words have more than one meaning depending on the context and not all meanings coincide for a given cognate in the two languages. Some word pairs coincide in a few meanings, vary in many (or) - some coincide in many and vary in few. For example, "cascade" refers to a water-fall in English and French, but in French it can also have the meanings of "a freakish prank, a spree, an actor's ad-lib

wisecrack" in slang or very informal language.

Deceptive Cognates

Deceptive cognates are words which are similar or identical in spelling in English and French but have a different meaning in the two languages. The term deceptive cognate does not refer exclusively to the origin of the words as different meanings may be observed in words sharing their origin or having similar spelling. For example, the word "decade" in English and French share the same Latin origin "decas, -adis", however in French the main meaning refers to ten days and in English to ten years. "Pain" meaning "bread" in French is derived from the Latin word "panis" whereas the English word "pain" developed from the Latin "poena" meaning penalty, punishment, pain. There are approximately 950 deceptive cognates.

(For reference on the teaching material for day I see Robert Lado, Linguistics Across Cultures . Ann Arbor, The University of Michigan Press, 1960, p. 82
and Edward Anthony. "The Teaching of Cognates," Language Journal , Vol. IV, (1952-53), pp. 79-82)

Deceptive Cognates

Verbs

attendre - "to wait, to expect", not "to attend" (assister
   à) nor "to attend to" (s'occuper de).

chanter - "to sing", not "to chant" (psalmodier). Another
   meaning of "chanter" is "to blackmail".

défendre de - "to forbid", not "to defend".

demander - "to request", not "to demand". (exiger)

partir - "to depart, to go off (a gun)", not "to part"
   (séparer, se quitter). To part with = se
   débarrasser de.

regarder - "to look at, to concern", not the usual sense
   of "to regard" (considérer).

rester - "to remain", not "to rest, repose, rest upon"
   (reposer, appuyer sur).

retourner - "to return - go back", not "to return - come
   back" (revenir, rentrer).

sortir - "to come out, go out, to come from, to bring out",
   not "to sort" (trier).

travailler - "to work, to worry, agitate", not "to
   travail" (souffrir, peiner) nor "to travel"
   (voyager).

vendre - "to sell, to be bribed" (il s'est vendu),
   not "to vend" (colporter).

Nouns

actualité - "an event or topic of the present", generally
   not English "actuality" (réalité).

l'allée - "the garden path, lane, aisle", not "the

alley" (la ruelle).

appareil - "preparations for display, equipment, apparatus
(telephone, airplane, stove, denture)", not
"apparel" (costume, vêtement).

armoire - "wardrobe, closet", not "an armory" (arsenal,
salle d'armes).

barbe - "a beard", not "a barb" (la dent d'une flèche).

bonhomme - in spite of its apparent meaning, it means
"old fellow, old cuss, etc. "

boxe - "boxing, pugilism, a box stall", not "a box"
(une boîte).

bureau - "a desk", not "a bureau" (un chiffonnier).

cabine - "a cabin (on board of ship)", not "a cabin"
(on land), (une cabane).

cave - "cellar, wine cellar", not "cave" (caverne).

chance - "luck, possibility, risk", not often "an
opportunity" (occasion).

citron - "a lemon", not "a citron" (un cédrat, une
sorte de pastèque).

course - "running, a race, an errand, a trip", not "a
course" (un cours, un service, un plat).

dent - "the tooth, the cog, the scallop (of an edge)",
not "a dent" (une entaille).

enfant - "a child", not "an infant" (un bébé).

étage - "a story, floor (of a building)", not "a
stage" (in a theater: une scène).

fête - "the festival", not "the feast" (le banquet,

le festin).

gardien - "a guard, keeper", <u>not</u> (a legal) guardian

(of children), (un tuteur).

habit - "a swallow tail, dress coat, attire, clothing

(les habits)", <u>not</u> "a habit" (clothing)

(habit de cheval, habit de nonne) nor "the

habit" - custom (l'habitude).

patron - "the boss, the captain (of a ship)", <u>not</u> "the

patron" (except for "le saint patron"), (le

client, du chaland, le protecteur).

place - "a public square, a market, a seat", <u>not</u> English

"place" (endroit).

prune -"a plum ", <u>not</u> "a prune" (pruneau).

raisin - "a grape", <u>not</u> "a raisin" (un raisin sec).

station - "a stopping place", <u>not</u> English "railway

station" (une gare).

tarte - "a pie (of fruit or custard, generally open-

faced)", <u>not</u> "a tart" (une petite pâtisserie

aux fruits).

voyage - "trip, travel", <u>not</u> "a voyage" (voyage en mer).

Adjectives

ancien (before a noun) - "former", <u>not</u> "ancient"

(sense if adjective follows).

content - "glad, happy", <u>not</u> English "content"

(satisfait, contenté).

gentil - "nice, Gentile", <u>not</u> English "gentle"

(doux) nor "genteel" (distingué).

(For reference see Robert Seward. Dictionary of French Deceptive Cognates . Bates College, S.F. Vanni, New York, 1947.)

Greene, E. J. H., Faucher, M., Healy, D. M. Reflex French. MacMillan of Canada, Toronto, 1966.

Experimental Treatment for the
Oral Recognition of Cognates

Day II Teacher's instruction

The French alphabet is studied on a sound - letter correspondence. The teaching of the French alphabet should give the student the opportunity 1) to establish the auditory - visual correspondence, i.e. hear the sound and see the letter corresponding to it and 2) as a modification, to produce the sound of the letter when he sees it. Additional phonetic information to be given to the students include the following: 1) the French phonetic system contains no dipthongs, that is, vowel slurs, 2) in French there are only three consonants which do not exist as such in Enlgish, the /ɲ/, /y/ and /r/, 3) nine new vowel sounds must be mastered, the /y/, /ø/, /oe/, the two low "a" sounds /a/ and /a/ and four nasal vowels /ɛ̃/, /œ̃/, /ã/, /ɔ̃/, and 4) the French "h" is never pronounced and "y" very often has the phoneme sound of an "i".

In addition, the French vocalic system is reviewed. The lesson objective for the study of the French vocalic system is:

1. L'étudiant étudie d'abord les sons des voyelles.

2. On lui donne les règles correspondant à l'usage de ces voyelles (son) ainsi que de leurs transcriptions graphiques afin qu'il sache comment écrire ce qu'il sait dire et comment prononcer ce qu'il lit.

3. L'étudiant est amené à appliquer les règles à la prononciation des congénères.

The students receive the following handout on the French vowels.

Les Voyelles

La voyelle écrite "i"

Le "i" n'a qu'un seul son représenté par le symbole /i/.

Quelques graphies du son "i" sont:

i = ici

ï = (tréma) laïque (lay, secular)

î = (accent circonflexe) île (island, isle)

-il = baril (keg, cask)

-id = nid (nest)

-it = habit (dress, costume, outfit)

-ie = magie (magic)

Les voyelles écrites "e", "é", "è", "ê"

1. Le "e" muet /ə/ en général est prononcé après
   deux ou trois consonnes différentes articulées. ex.
   justement, mercredi, etc.

2. Le "é" est fermé /e/ lorsqu'il est surmonté
   d'un accent aigu. ex. difficulté, idée, été.

3. a) Le "è" et "ê" sont ouverts /ɛ/ quand ils sont
   surmontés d'un accent grave ou d'un accent circon-
   flexe. ex. père, tête, progrès.

   b) On entend le même son /ɛ/ dans la terminaison
   "-et", ex. objet, effet, etc.,
   dans toutes les terminaisons en "er", ex. cancer,
   univers, etc. quand le "r" est sonore,
   ainsi que le "e" se trouve devant "x". ex.
   examen, express, complexe, texte, etc.

La voyelle écrite "a"

Nous distinguons deux sortes de sons "a":

1. Le "a" /a/ est antérieur sans accent. ex. ami,
   avocat, etc. ou surmonté d'un accent grave. ex.
   voilà, ça et là, déjà, il est là, etc.

2. Le "a" /ɑ/ est postérieur a) quand il est surmonté
   d'un accent circonflexe, ex. mâle, pâle, in-
   fâme, etc. b) dans les terminaisons "-ation,
   -asion, -assion" ex. végétation, fondation,
   invasion, occasion, évasion, persuasion, compassion,
   passion, etc. et c) dans la terminaison "-as" (s

sonore), ex. hélas, atlas, etc.

La voyelle écrite "o"

1. a) Le "o" ouvert /ɔ/ est toujours sans accent, ex.
   objet, occasion, globe, encore, etc. (l'hôpital
   est la seule exception).

   b) Les terminaisons en "-um" font entendre un "o"
   ouvert, ex. pensum, radium, harmonium, opium,
   aqarium, album, maximum, etc.

2. a) Le "o" /o/ surmonté d'un accent circonflexe
   est toujours fermé, ex. côté (side), nôtre, etc.

   b) Le "o" est fermé quand il s'écrit "au,
   eaux, aux" ex. travaux, journaux, aussi, etc.

   c) Le "o" à la fin des mots est toujours fermé
   qu'il soit ou non suivi d'une consonne muette, ex.
   zéro, vos, galop, etc.

   d) Le "o" est fermé dans la terminaison "-otion",
   ex. émotion, dévotion, motion, etc.

La voyelle écrite "u"

La voyelle "u" n'a qu'un seul son /y/. Le "u" avec
ou sans accent se prononce toujours /y/, ex. tu,
le but (aim), la bûche (log), etc.

L'ensemble écrit des voyelles "ou"

La voyelle "ou" /u/ n'a qu'un seul son. Le "ou"
avec ou sans accent se prononce toujours /u/, ex.
tout, où, aujourd'hui, août, etc.

L'ensemble écrit des voyelles "eu"

L'ensemble écrit des voyelles "eu" a deux sons possibles:

1. Le "eu" /ø/ est fermé à la fin des mots quelle que soit la façon dont il est écrit, ex. Dieu (God), milieu, jeu, etc.

    b) Le "eu" est fermé au commencement des mots, ex. Eugène, euphorie, européen, etc.

2. Le "eu" /oe/ est ouvert devant le "r", ex. beurre, heure, coeur, etc.

Les voyelles nasales orales

Les voyelles nasales ont une résonnance nasale. C'est pour cela qu'on les appelle voyelles nasales. Il y a quatre voyelles nasales orales.

Les ensembles écrits correspondant à la voyelle nasale "in"

L'ensemble écrit "in" correspond à la voyelle orale /ɛ̃/. Lorsque le "i, ie ou y" est suivi de "m" ou "n" vous le prononcez /ɛ̃/ nasal. ex. intérieur, instant, simplicité, impression, académicien, rien, chien, syntaxe, nymphe, Olympe, symbole. L'ensemble "en" se prononce "in" dans les mots d'origine étrangère ou savante. ex. examen, pentagone, etc.

Les ensembles écrits correspondant à la voyelle nasale "an"

L'ensemble écrit "an" correspond à la voyelle orale /ã/. Lorsque le "a" est suivi de "m" ou "n" il se prononce /ã/ nasal. ex. océan, danse, volcan, etc. "En" suivi ou non d'une consonne se prononce en général

"an", ex. en, centre, offense, agence, encore, etc.

<u>Les</u> <u>ensembles</u> <u>écrits</u> <u>correspondant</u> <u>à</u> <u>la</u> <u>voyelle</u> <u>nasale</u> <u>"on"</u>

L'ensemble écrit "on" correspond à la voyelle orale /$\tilde{ɔ}$/. Lorsque le "o" est suivi de "m" ou "n" vous le prononcez /$\tilde{ɔ}$/ nasal, ex. concert, oncle, pardon, surnom, prénom, complet, etc.

<u>Les</u> <u>ensembles</u> <u>écrits</u> <u>correspondant</u> <u>à</u> <u>la</u> <u>voyelle</u> <u>nasale</u> <u>"un"</u>

L'ensemble écrit "un" correspond à la voyelle orale /$\tilde{œ}$/. Lorsque le "u" est suivi de "m" ou "n" il se prononce /$\tilde{œ}$/ nasal, ex. lundi, brun, humble, etc.

On day II the student studies the rules for pronouncing the French vowels i, e, é, è, ê, a, o, u, ou and eu.

(For reference see Armande Lebrun. <u>La</u> <u>Phonétique</u> <u>rendue</u> <u>facile</u> , Edition de Rodage, Montréal, 1966.)

<u>Day</u> <u>III</u> Teacher instruction

The student studies the rules for pronouncing and writing the four French nasal vowels as set out in the handout on the French vowels. In addition, students receive the first four cognate word- ending regularities of "-té, -ie, -nce, and -iste" and ten example words for each category. For each example word a short definition is given in French. The student is asked to apply the phonetic sounds of the French alphabet and the French vowels to these English-French cognates. He tries to pronounce the cognate word in French. After five seconds the teacher says the word in French and the student is asked to repeat the

model pronunciation given by the teacher. The same procedure is followed for the remaining cognate words in the cognate word- ending categories. After the completion of this exercise the student rewinds the tape and listens carefully to compare his pronunciation with the model in order to ascertain how close his pronunciation approximates those of the model. This exercise takes place in the language laboratory.

Day IV Teacher instruction

The student hears 20 English-French cognate words pronounced in French twice. He is asked to guess the English equivalent for the French word. After five seconds the master-voice says the English equivalent. The lexical items in this practice cognate wordlist are neither contained in the Oral Cognate Word Test, part I and II nor in Le Français Fondamental Premier Degré .

During the remaining part of the lesson students receive four other cognate word-ending regularities, the "-eur, -isme, -cien and -re" and study them in the same manner as on Day III.

Day V and Day VI Teacher instruction

The same procedure as on day IV is followed, except a different practice cognate wordlist of 20 lexical items and four different word-ending regularities are used: the "-er,

-ier, -ique, and -if" on day V and the "-eux, -tiel, é, and -ment" on day VI. The following is the practice cognate wordlist which is presented to the students.

Practice Cognate Word List

Directions You shall hear 20 French words which have the same meaning as the English word and identical or similar spelling. The French word will be pronounced twice; followed by a pause in which you are asked to guess the English equivalent for the French word. If you know the corresponding English word for the French word say it. After five seconds the master-voice says the English equivalent.

French	English
1. beige	1. beige
2. canal	2. canal
3. cage	3. cage
4. bizarre	4. bizarre
5. automobile	5. automobile
6. activité	6. activity
7. abondance	7. abundance
8. absence	8. absence
9. aliment	9. aliment
10. altitude	10. altitude
11. aptitude	11. aptitude
12. climat	12. climate

13. civilisation	13. civilization
14. circuit	14. circuit
15. alphabet	15. alphabet
16. affection	16. affection
17. agriculture	17. agriculture
18. aviation	18. aviation
19. affirmation	19. affirmation
20. administration	20. administration

1. nickel	1. nickel
2. distance	2. distance
3. crime	3. crime
4. élégance	4. elegance
5. muscle	5. muscle
6. nièce	6. niece
7. nature	7. nature
8. influence	8. influence
9. éléphant	9. elephant
10. conséquence	10. consequence
11. combat	11. combat
12. indifférence	12. indifference
13. imitation	13. imitation
14. hygiène	14. hygiene
15. distribution	15. distribution
16. composition	16. composition
17. communication	17. communication
18. conjonction	18. conjunction

19. création	19. creation
20. exercice	20. exercise

1. passeport	1. passport
2. péril	2. peril
3. pipe	3. pipe
4. scène	4. scene
5. profit	5. profit
6. problème	6. problem
7. prison	7. prison
8. pigeon	8. pigeon
9. poison	9. poison
10. proverbe	10. proverb
11. talent	11. talent
12. violence	12. violence
13. portrait	13. portrait
14. parachute	14. parachute
15. océan	15. ocean
16. religion	16. religion
17. signature	17. signature
18. tradition	18. tradition
19. opération	19. operation
20. récréation	20. recreation

Experimental Treatment for the

Written Recognition of Cognates

Day I see page 132 of Appendix A

Day II

The objective for the written recognition of cognates is as follows:

In order to facilitate the recognition of English-French cognates in reading the student learns:

1. the word-ending regularities of the English-French cognates. (see definition of cognates)

2. the morphological characteristics of the French nouns, verbs, adjectives and adverbs, and

3. how to use context clues in word recognition and comprehension.

Students study the first four word ending regularities of nouns: the "-té, -ie, -ance (or) -ence, and -iste" and formulate rules about French noun characteristics: the gender - masculine or feminine, the number - singular or plural.

Nouns

1. Nouns are words like "électricité, comédie, tracteur".

2. Nouns usually form the plural with an s.

3. Nouns may be preceded by "le, la, l', les, un, une, de, d', des", numbers, and adjectives.

4. Nouns name things.

5. Nouns ending in "-té, -ie or -eur" are feminine (except le bonheur) if they are abstract nouns.

In order to practice the written recognition of

cognates, one excerpt taken from <u>Vidéo-Presse</u> is given. The student reads the excerpt "La Renaissance italienne" on day II independently at first and underlines the words he thinks he knows. Then the teacher reads the excerpt with the students and points out the meaning of any unfamiliar word and how the meaning of this word could be guessed. The teacher asks a few questions on the context of the excerpt to verify student's comprehension of the excerpt.

<u>Day III</u>

The remaining four word-ending regularities of French-English cognate nouns: the "-eur, isme, -cien, and -re" are studied as on day II. Students receive a list explaining the semantic value of the suffixes contained in the word-ending regularities, as well as of the morphological characteristics. Recognition of cognates is practised with the excerpt on "La Pollution" taken from <u>Vidéo-Presse</u> . Students review the French noun characteristics contained in this text. The following information is presented to the students by means of a lecture.

Teacher instructions

Vocabulary Development

We communicate in a variety of ways but mainly we

communicate verbally. Words are not things but symbols that stand for things. Words are independent units of speech and writing. What a person speaks, hears, reads, writes, and often what he visualizes and observes -- the whole sensorium of man -- is expressed in words. Thus, your study habits include analyzing, observing, investigating, and interrelating systematically word parts (roots, prefixes and suffixes) so as to increase your knowledge of vocabulary.

Suffixes

A suffix is an ending which is added to a word root in order to form a new word. Suffixes are also often used to change a word from one part of speech to another, eg. calme = adj. calmement = adv.

Les suffixes "-té, -ie, -ence (ou) -ance, et -re" forment de nombreux substantifs. ex. beauté, comédie, fréquence, mètre.

Les suffixes "-isme, -iste" forment des substantifs indiquant: la doctrine et la profession: socialisme, journalisme; la personne qui la pratique: socialiste, journaliste).

Les suffixes "-eur, -cien" forment de nombreux substantifs (personne qui fait qqch.), eg. docteur, mécanicien.

Le suffixe "-ique" forme des adjectifs ex. ironique, ou des substantifs, ex. fabrique.

Les suffixes "-eux, euse; -if, ive; -tiel, tielle; -é, ée"
forment de nombreux adjectifs. ex. ambitieux, érosif,
substantiel, exilé.

Le suffixe "-ment" forme de nombreux adverbes. ex.
certainement.

Suffixes généraux issus d'éléments
grecs et latins

-cratie n.f. pouvoir politique ou social   démocratie.

-graphe n.m. personne qui enregistre   lexicographe,

               appareil enregistreur   phonographe.

-graphie n.f. mode d'enregistrement   sténographie.

-logie   n.f. science   bactériologie

                                          psychologie.

-logue m.et f. scientifique, spécialiste   géologue,

-logiste   physiologiste.

-mètre n.m. qui mesure   baromètre,

                                          thermomètre.

-métrie n.f. mesure   psychométrie.

-phile   m.et f. qui aime, qui a de   francophile.

               l'affinité pour

-philie n.f. affinité pour, attachement   anglophilie

-phone m.et f. qui parle, qui est enregistré téléphone,

               ou enregistre   francophone.

-phonie n.f.   transmission de sons   radiophonie.

-scope m. et f. qui examine   téléscope,

stéthoscope.

(For reference see Patrick O'Rourke. Toward a Science of Vocabulary Development. Mouton and Co., N.V. The Hague, 1974. and

Jean Dubois. Etude sur la dérivation suffixale en français moderne et contemporain. Paris, Larousse, 1962.)

Day IV

Students study the following cognate word-ending regularities: "-er, -ier, -ique, and -if" in the same way as on day III. In addition the characteristics of the French verb are studied.

Verbs

1. Verbs are words like "examiner, dénier, citer".

2. Verbs can show a change in tense by a change in sound and spelling. eg. You can form the present indicative of the verb "parler", "je parle"; the imperfect "je parlais"; the future "je parlerai"; and the present conditional "je parlerais".

3. Verbs may be preceded by nouns, personal pronouns or direct and indirect objects, like je, tu, il, elle, nous, vous, ils, elles, le, la, lui, leur, etc.

4. Verbs are words that imply an action or a situation.

Recognition of cognates is practiced with the excerpt "L'Empire Inca" taken from Vidéo-Presse .

Day V

Students study the following cognate word-ending regularities: "-eux, -tiel, é, and -ment" in the same way as on day III. In addition the characteristics of the French adjective are reviewed.

Adjectives

1. Adjectives are words like "dramatique, furieux, défensif".

2. Adjectives agree in number and gender with the noun they modify. eg. "un plan secret -- une décision secrète; les hommes intelligents -- les femmes intelligentes".

3. Descriptive adjectives follow the noun.

4. Adjectives can be put in the comparative and superlative form.

Recognition of cognates is practiced with the excerpt "Les Dinosaures" taken from Vidéo-Presse . The students are told how many cognates are contained in the excerpt. After they have read and tried to identify the cognates the teacher lets the students point out the cognates and to which cognate word-ending regularity they belong. Understanding of the excerpt is ascertained by the teacher's questions.

Day VI

The characteristics of the French adverbs are studied.

Adverbs

1. Adverbs are words like "certainement, simplement, immédiatement".

2. Words that end in -ment (and are neither nouns nor verbs) are adverbs.

3. Adverbs modify verbs, adjectives or other adverbs.

eg. Nous allons quelquefois au théâtre. (modifie le verbe "aller")

Madame Curie était une femme vraiment géniale. (modifie l'adjectif "géniale")

Nous allons très rarement au cinema. (modifie l'adverbe "rarement")

4. There are no absolute rules concerning the position of an adverb in a sentence. Generally speaking, the adverb which modifies a verb is placed directly after the verb.

eg. La rivière coulait lentement sous le pont.

5. Adverbs may frequently be moved to new positions in the sentence without changing the general meaning of the sentence. eg.

Maintenant je comprends votre inquiétude.

Je comprends maintenant votre inquiétude.

Je comprends votre inquiétude maintenant .

Using Context Clues in Word Recognition

Until now you have become acquainted with the definition of cognates, including partial and deceptive cognates, the ten example words of the sixteen cognate

word-ending regularities, the characteristics of French nouns, verbs, adjectives and adverbs, the suffixes of cognates which indicate parts of speech like the noun suffixes "-isme, -cien," etc. and some of the meanings of suffixes like "-phone, -scope, -mètre", etc. In order to practice and apply this knowledge, you have read different French excerpts.

The facilitation effect of English-French cognates for French vocabulary acquisition relates very closely to your vocabulary power in English. If you do not know the meaning of the French-English cognate in English, the word is of no help to you in understanding it in French.

One way of figuring out word meanings is the study and knowledge of suffixes, prefixes and root words. eg. "tele" meaning far and "phone" meaning sound, thus "telephone" has the literal meaning of "far sound". But take care, most words have larger and more involved meanings than the sum of the parts would lead one to deduce.

Another strategy for figuring out meanings of unfamiliar words can be the use of context clues. Linguistic context can provide clues to the meanings of unfamiliar words in the following ways:
1) through definition, eg. To give the submarine the continual attention it needs, the officers and crew are divided into watches . A watch is a four-hour period of duty.

2. example, eg. The boys were lying still, heads down, __inert__ , like __dead__ __men__ except for their loud and broken gasps for air.

3. modifiers, eg. Simultaneously the __feminist__ __movement,__ __seeking__ __to__ __achieve__ __for__ __women__ __as__ __much__ __equality__ __with__ __men__ __as__ __possible__ , was quick to capitalize on the behaviorist theories.

4. restatement, eg. hypothesis, a sort of guess ...

5. inference, which requires the reader to see relationships not explicitly stated. eg. The practicing physician as a rule is completely unskilled in __dietetics__ . His preliminary training encompasses little or nothing concerning the details of food prescription.

The attentive reader will observe the close parallel between __unskilled__ and __preliminary__ __training__ . From this parallel he will infer that the second sentence is probably a modified restatement of the first. He will then conclude that dietetics has something to do with "details of food prescription". While he has by no means a full definition of __dietetics__ , he has enough meaning to allow him to proceed.

Effective reading is really a thinking process and the extent to which context reveals meaning varies with the experience of the reader, but the following limitations of using context clues in word recognition should be mentioned:

1. If you guess the meaning of a word from its context, it

may not always be a correct guess.

2. The context reveals only one meaning of a new word, not all its possible meanings.

3. The growth of vocabulary by context is a slow developing process.

You have been equipped to use word analysis and context clues to assist you in deciphering unfamiliar words. It is now up to you to make use of these aids to increase your English as well as French vocabularies.

Recognition of cognates is practiced with the excerpt "L'Avenir de L'Amérique Centrale" taken from Vidéo-Presse . (For reference on the French noun, verb, adjective and adverb characteristics see: Jone D. Dashwood. Patterns For Writing. W.J. Cage Limited, Toronto, 1966. and Léon-Fran,ais Hoffmann. L'Essentiel de la Grammaire Française Deuxième Edition. The Scribner French Series, New York, 1973.

For reference on using context clues see S. Weintraub, "Development of Meaning Vocabulary in Reading," Reading Teacher , Nov., 1968, 22: 171-175. and Lee C. Deighton. Vocabulary Development in the Classroom . New York; Bureau of Publications, Teachers College, Columbia University, 1959.)

The following is the English-French cognate word-ending regularity list with ten example words for each

word-ending regularity which is used in both treatments.

<div align="center">French -té   =   English -ty</div>

1. admissibilité = fait d'être admissible

2. beauté = caractère de ce qui est beau

3. calamité = grande infortune ou malheur, catastrophe

4. captivité = état de celui qui est captif

5. collectivité = ensemble d'individus groupés naturelle-

      ment ou pour atteindre un but, nation

6. curiosité = soin, souci qu'on a de quelque chose.

      Désir de savoir les secrets d'autrui

7. diversité = caractère, état de ce qui est divers

8. électricité = une des formes de l'énergie

9. éternité = durée qui n'a ni commencement ni fin

10. extrémité = la partie extrême, qui termine une chose

350 abstract nouns ending in -té are feminine.

<div align="center">French -ie   =   English -y</div>

1. catégorie = comment on range des objets

2. comédie = le genre comique

3. économie = art de bien administrer une maison ou

      l'état

4. épilepsie = maladie nerveuse caractérisée par de

      brusques attaques convulsives avec perte de

      connaissance

5. géologie = l'étude de la structure et de l'évolution
             de l'écorce terrestre

6. géométrie = une branche de la mathématique

7. ironie = manière de se moquer (de qqn. ou de qqch.)
           en disant le contraire de ce qu'on veut faire
           entendre

8 philosophie = les recherches sur la connaissance

9. théorie = ensemble d'idées, de concepts abstraits,
            plus ou moins organisés, appliqué à un
            domaine particulier

10. pharmacie = science des remèdes et des médicaments

680 nouns with the -ie ending are feminine.

                French -nce   =   English -ncy

1. fréquence = caractère de ce qui arrive plusieurs fois

2. immanence = caractère de ce qui est immanent

3. indécence = caractère de ce qui est indécent

4. inélégance = manque d'élégance

5. pertinence = caractère de ce qui est pertinent

6. polyvalence = qui a plusieurs fonctions, plusieurs
              activités différentes

7. régence = gouvernement d'une monarchie par un régent

8. transparence = phénomène par lequel les rayons
              lumineux visibles sont perçus à travers
              certaines substances

9. trivalence = en chimie, qui possède la triple valence

10. univalence = en chimie, qui possède une valence

All ten words in this list are feminine nouns.

<div align="center">French -iste   =   English -ist</div>

1. artiste = créateur d'une oeuvre d'art

2. évangeliste = auteur de l'un des Evangiles

3. humaniste = homme qui a une connaissance approfondie des
        langues et littératures grecques, latines

4. journaliste = personne qui collabore à la rédaction
        d'un journal

5. linguiste = spécialiste en linguistique, science
        de la langue

6. météorologiste = personne qui s'occupe de l'étude
        scientifique des phénomènes atmosphériques

7. touriste = personne qui se déplace, voyage pour son
        plaisir

8. impérialiste = partisan d'un empereur, du régime
        impérial

9. spécialiste = personne qui a des connaissances appro-
        fondies dans un domaine déterminé et
        restreint

10. socialiste = personne qui fait profession de socialisme
        "le bien général prévaut sur les
        intérêts particuliers"

All ten words in this list are masculine nouns.

French -eur = English -or (or) -er

1. constructeur = celui qui construit qqch.

2. décorateur = personne qui fait des travaux de
   décoration

3. docteur = personne qui possède le titre de
   docteur, un médecin

4. évaporateur = appareil employé à la compression
   où se produit l'évaporation

5. exploiteur = personne qui tire un profit abusif d'une
   situation ou d'une personne

6. gladiateur = homme qui combattait dans les jeux du
   cirque, à Rome

7. imitateur = personne qui imite les gestes,
   le comportement d'autrui

8. imposteur = celui qui abuse de la confiance, de la
   crédulité d'autrui par ses discours
   mensongers, dans le dessein d'en tirer profit

9. narrateur = personne qui raconte

10. tracteur = véhicule automobile

All ten words are masculine nouns.

French -isme = English -ism

1. collectivisme = un groupe de personnes

2. dogmatisme = caractère des croyances (religieuses,
   philosophiques) qui s'appuient sur des dogmes.

3. égotisme = culte du moi, poursuite trop exclusive de

son développement personnel

4. humanisme = formation de l'esprit humain par la culture

littéraire ou scientifique

5. hypnotisme = ensemble des phénomènes qui consti-

tuent le sommeil artificiel

6. individualisme = attitude d'esprit, état de fait favori-

sant l'initiative et la réflexion individu-

elle, le goût de l'indépendance

7. matérialisme = état d'esprit caractérisé par

la recherche des jouissances et des biens

matériels

8. militarisme = prépondérance de l'armée, de l'élément

militaire dans la vie d'une société

9. tourisme = le fait de voyager

10. socialisme = organisation sociale qui veut entend faire

prévaloir l'intérêt, le bien général

sur les intérêts particuliers

The "-isme" noun ending is always masculine.

                French -cien   =   English -cian

1. électricien = technicien ou ouvrier spécialisé

dans le matériel et les installations élec-

triques

2. magicien = personne qui pratique la magie

3. métaphysicien = personne qui s'occupe de réflexions

abstraites

4. opticien = celui qui connaît ou enseigne l'optique

5. patricien = personne qui appartenait à la classe su-

périeure des citoyens romains, aristocrate

6. phonéticien = linguiste spécialisé dans la phonétique

7. politicien = personne qui exerce une action politique

dans le gouvernement ou dans l'opposition

8. tacticien = celui qui est spécialisé dans l'emploi

des moyens de combat, dans l'exécution

des plans stratégiques

9. technicien = personne qui possède, connaît une

technique particulière

10. pharmacien = personne qui exerce la pharmacie

The "-cien" is a masculine ending.

French -re   =   English -er

1. géomètre = appartient à la géométrie

2. hexamètre = qui a six pieds ou six mesures, ex.

un vers hexamètre

8. kilomètre = unité pratique de distance qui vaut

mille mètres (km)

4. lettre (f) = écrit que l'on adresse à qqn. pour lui

communiquer qqch.

5. millimètre = de milli- et mètre; millième partie

du mètre

6. ministre = homme d'Etat placé à la tête d'un

département ministériel, aussi prêtre

7. monstre = être, animal fantastique et terrible (des

légendes, mythologies)

8. novembre = onzième mois de l'année

9. septembre = neuvième mois de l'année

10. thermomètre = instrument destiné à mesurer des

températures

Except for "lettre" all words in this list are masculine.

French -er   =   English drop -er or -r

1. citer = rapporter un texte à l'appui de ce que l'on

avance

2. confirmer = affirmer l'exactitude, l'existence de qqch.

3. dater = mettre la date sur (un écrit, un acte)

4. déplorer = pleurer sur, regretter beaucoup

5. déclarer = faire connaître (un sentiment, une volon-

té, une vérité) d'une fa,on expresse

6. destiner = fixer d'avance, assigner, réserver

7. détecter = révéler l'existence de (un corps,

un phénomène caché)

8. discipliner = accoutumer à la discipline, donner le sens

de l'ordre, du devoir

9. disputer = avoir une discussion

10. examiner = considérer avec attention

The -er verbs in this list form their present tense by

adding to the stem (---) the following endings:

```
je --- e                nous --- ons
tu --- es               vous --- ez
il --- e                ils --- ent
```

French -ier   =   English -y

1. défier = inviter à venir se mesurer comme adversaire

2. dénier = refuser de reconnaître comme vrai (un fait)

3. glorifier = honorer qqn., qqch. en proclamant ses mé-
        rites, sa gloire

4. horrifier = remplir, frapper d'horreur

5. identifier = reconnaître

6. modifier = changer (une chose) sans en altérer la
        nature

7. simplifier = rendre plus simple, moins complexe

8. terrifier = frapper de terreur, d'une vive crainte

9. unifier = faire de (plusieurs éléments) une seule et
        même chose

10. purifier = rendre pur, débarrasser de la corruption

French -ique   =   English -ic

1. arithmétique adj., f = relatif à l'arithmétique

2. clinique adj., f = méthode qui consiste à faire un
        diagnostic par l'observation

3. comique adj., m = qui appartient à la comédie

4. dramatique adj., f = le genre dramatique, très grave et

dangereux

5. économique adj., m = qui réduit les frais

6. électronique adj., f = propre ou relatif à l'électron

7. électrique adj. = propre ou relatif à l'électricité

8. gothique adj., f = l'art du moyen âge en Europe du

XIIe au XVIe siècle

9. historique adj., m = qui se rapporte à l'histoire

10. humoristique adj. = qui s'exprime avec humour

The French -ique ending can be an adjective or noun ending.
The French adjective generally forms the plural by adding
an "s". Feminine and masculine adjectives have the same
ending.

French -if   =   English -ive

1. décisif = qui décide, qui conduit à un ré-

sultat définitif

2. défensif = qui est fait pour la défense

3. définitif = qui est fixé de manière qu'il n'y ait

plus à revenir sur la chose

4. digestif = qui contribue à la digestion

5. diminutif = qui donne, ajoute une idée de petitesse

6. duplicatif = qui double une quantité, un volume

7. érosif = qui produit l'érosion

8. excessif = qui dépasse la mesure souhaitable ou

permise

9. expressif = qui a beaucoup d'expression

10. expulsif = qui est expulsé d'un lieu ou pays

Adjectives in "f" change "f" into "ve" to form the feminine form of the adjective. eg. décisif = décisive

French -eux   =   English -ous

1. courageux = qui a du courage

2. délicieux = qui est extrêmement agréable

3. fabuleux = invraisemblable quoique réel, qui appartient à la fable, au merveilleux

4. furieux = qui est animé, excité par une passion folle, sans frein

5. harmonieux = agréable à l'oreille (en parlant d'un son, d'une combinaison de sons)

6. lumineux = qui émet ou réfléchit la lumière

7. malicieux = qui a de la malice

8. mélodieux = agréable à l'oreille

9. miraculeux = qui est le résultat d'un miracle

10. mystérieux = qui est inconnaissable, incompréhensible ou inconnu

Adjective endings in "x" change "x" into "se" to form the feminine. eg. courageux = courageuse

French -tiel   =   English -tial

1. différentiel = relatif aux différences ou aux variations

2. insubstantiel = qui n'a pas de substance

3. pénitentiel = relatif à la pénitence

4. pestilentiel = qui tient de la peste

5. préférentiel = qui établit une préférence

6. présidentiel = relatif au président, à la présidence

7. providentiel = qui se rapporte à la providence

8. résidentiel = propre à l'habitation, à la résidence

9. substantiel = qui appartient à la substance

10. torrentiel = qui caractérise les torrents

Adjectives in "el" double the final consonant before adding "e" to form the feminine. eg. résidentiel = résidentielle

French -é   =   English -ed

1. condensé = qui contient beaucoup de matière sous
        un petit volume

2. déterminé = qui a été précisé, défini

3. discipliné = qui observe la discipline

4. excité = qui a une activité mentale, psychique très
        vive

5. exilé = qui est en exil

6. exposé = qui met en vue

7. incliné = enclin, porté (à)

8. inspiré = animé par l'inspiration, souffle divin ou
        créateur

9. persuadé = qui est amené à croire, à penser,

à vouloir

10. qualifié = qui satisfait aux conditions requises

To form the feminine form of a French past participle you add another "e". eg. condensé = condensée

French -ment   =   English -ly

1. certainement = d'une manière certaine

2. naturellement = conformément aux lois naturelles

3. rapidement = d'une manière rapide

4. complètement = d'une manière complète

5. automatiquement = d'une manière automatique

6. actuellement = dans les circonstances actuelles

7. extrêmement = d'une manière extrême

8. finalement = à la fin, pour finir

9. immédiatement = d'une manière immédiate

10. simplement = d'une manière simple, sans complication

Most French adverbs are formed by adding _ment_ to the feminine form of the corresponding adjective. eg. calme = calmement

(For reference on the English-French cognates see the author's cognate wordlist.

For the French definitions of the cognate words see Paul Robert. Le Petit Robert, Dictionnaire de la langue fran.aise. Publ. Alain Rey, Paris, 1972.

Excerpts Used for the Written Recognition of Cognates

La Renaissance italienne

Directions Underline the words you think you know and write down the translation for the words you have underlined.

Au XVe siècle, la riche famille des Médicis règne sur la ville de Florence en Italie (2). Elle se fait la protrectrice des peintres et des sculpteurs (11) désireux (21) de retrouver l'harmonie (2) et la magnificence de l' art gréco- romain . La cité (1) rivalise de splendeur (11), par ses palais, ses églises, ses monuments et ses fêtes (d.c.), avec Venise , Rome , etc. Tous les "humanistes" (5), ces hommes à la culture universelle , se passionnent alors pour la botanique (19), la zoologie (2), l'anatomie (2), la géologie (2), l'astrologie (2), la navigation , et surtout l'étude (9) des textes anciens pour retrouver les premières sources d' inspiration . On appelle cette période la "Renaissance" .
(Vidéo-Presse , Vol. IV, Numéro 4, décembre 1974, p. 38.)

La Pollution

Comment l' air se pollue!

Le plus grand responsable de la pollution de l' air est certainement (24) le tuyau d'échappement de l'

automobile . Et nous sommes loin de faire des efforts pour
éliminer cet ennemi . Que de déplacements nous pourrions
effectuer sans avoir recours à l' automobile ! Nos moindres
déplacements requièrent un véhicule . Afin de diminuer l'
effet (6) néfaste de l'oxyde de carbone , le Gouvernement
oblige les fabricants d'automobiles à installer des
systèmes anti-pollution sur tous les nouveaux véhicules .
Informe - toi auprès de plusieurs garagistes pour savoir si
les dispositifs anti-pollution ont une influence sur le
coût de l'essence et sur le rendement de l'automobile .

Dans les usines, on dépose tous les ans des milliers
de dollars pour diminuer la pollution de l' air . Le
Gouvernement se montre assez sévère envers les fabricants
d' automobiles . Et toi, que feras-tu? Il n'est plus
possible de rester (d.c.) indifférent . Tu dois faire ta
propre campagne en vue d'une plus grande utilisation de la
bicyclette .
Vidéo-Presse , Vol. III, Numéro 7, mars 1974, p. 53.

L'Empire Inca

A l' origine , une humble peuplade indienne installée
(23) sur les bords de l' océan Pacifique (19) avait
entrepris la conquête (7) des territoires (12) avoisinants.
Au lieu, cependant, d'anéantir complètement (24) les
vaincus, elle les intégrait à sa propre (d.c.) société (1)

et faisait corps avec eux. Un réseau efficace de communications et de voies commerciales était établi aussi rapidement (24) que possible , de façon à accélérer toutes espèces d'échanges. L' usage des terres était concédé à diverses classes sociales .

La succession royale , chez les Incas , ne se faisait pas automatiquement (24), comme chez les monarques européens de l'époque. Non seulement l'aîné, mais tous les fils de l' empereur (11) possédaient un statut égal, celui de descendant du Dieu-Soleil.
(Vidéo-Presse , Vol. III, Nu. 7, Mars 1974, page 8.)

Les Dinosaures

Les lézards terribles du Canada :

Le Canada passe (16) pour un pays jeune et peu peuplé (23). En fait, la plus grande partie de son immense territoire (12) se classe (16) parmi les plus vieilles terres émergées (23) du monde.

Notre pays compta jadis une population si nombreuse et si terrible que les Canadiens du XXe siècle s'enfuiraient à toutes jambes s'il leur était donné de voir un seul de ses "anciens (d.c.) Canadiens". Mais rassurez-vous: il y a bien peu de chances (d.c.) de croiser, sur l'autoroute Québec-Montréal en 1972, ... un dinosaure ! Cet étrange (18) animal --- dinosaure veut dire, en grec, lézard terrible

--- vivait il y a plus de 60 millions d'années, bien avant que l'homme n'apparaisse sur notre planète !

Des dinosaures ont été découverts dans diverses parties du monde, mais c'est en Alberta qu'on a retrouvé le plus grand nombre (15) et la plus grande variété (1) de spécimens de la période du crétacé supérieur (11) : plus de 65 espèces différentes !
(Vidéo-Presse , Vol. I, Numéro 7, Avril 1970, pp. 7-8)

L'Avenir de l'Amérique Centrale

L' Amérique centrale n'a d'avenir que celui du Tiers monde. Même Costa Rica, véritable paradis au sein de cet isthme de misères , n'est pas capable d'un démarrage économique réel dans les conditions actuelles du marché international . Il faudrait que les nations développées (23) revisent (16) leur politique (19) de prix et d'échange, qu'elles accordent des conditions plus favorables aux pays en voie de développement , qu'elles offrent des sommes plus avantageuses (21) pour les produits de ces pays auxquels elles devraient vendre (d.c.) moins cher. Et n'allons pas croire que cet "il faudrait" correspond à un acte de charité (1), il équivaut bien au contraire (8) à un acte de justice sociale, économique et humaine . Nous ne payons pas assez cher nos bananes et nous vendons (d.c.) trop cher nos tracteurs . Un travailleur

agricole du <u>Nicaragua</u> doit travailler (d.c.) jusqu'à vingt

fois plus longtemps qu'un travailleur <u>canadien</u> pour acheter

le même <u>produit</u> ....

Quand l'admettons-nous?

(<u>Vidéo-Presse</u> , Vol. III, Numéro 9, Mai 1974, p. 41)

The teacher's key for these excerpts is: the cognate words

are underlined and the number in brackets refers to the

cognate word-ending regularities as found in the definition

of cognates in Appendix A and (d.c.) corresponds to the

list of deceptive cognates.

Appendix B

Oral Cognate Recognition Test

Part I, the Pretest

Directions : You will hear one word in French pronounced twice, followed by four English words. One of the four English words has the same or nearly the same spelling as the French word but a slightly different pronunciation. Listen carefully and try to identify the English word which corresponds to the French word.

Indicate your response by a black mark which completely fills, but does not go outside of, the space between the dotted lines.

Use an HB pencil to mark your response.

Avoid retracing a mark so often that the mark becomes shiny.

Make sure that all erasures are done neatly and completely.

Example A

table	a) tableau	The French word "table"
	b) tabloid	corresponds to the
	c) table	English word "table".
	d) tablet	c) is the correct answer.

Example B

humble   a) hummock

b) humble   b) is the correct answer.

c) humbug

d) humdrum

The test now begins.

1. canne

        a) can
        b) calm
        c) cane *
        d) come

2. mine

        a) men
        b) mind
        c) mean
        d) mine *

3. amble

        a) amble *
        b) amber
        c) apple
        d) ample

4. bible

        a) bible *
        b) bile
        c) bibelot
        d) bibble

5. bile

        a) bile *
        b) bail
        c) ball
        d) bill

6. guide

        a) guild
        b) guilt
        c) gid
        d) guide *

7. vase

        a) vest
        b) vast
        c) vase *
        d) vas

8. plan

        a) plant
        b) plaid
        c) plane
        d) plan *

9. ibis

        a) ibis *
        b) ibid

c) iamb
d) ibex

10. fable

a) favour
b) fable *
c) fall
d) fail

11. fibre

a) fiber *
b) fibrin
c) fibber
d) fib

12. gain

a) gay
b) game
c) gang
d) gain *

13. gène

a) gene *
b) gem
c) jam
d) June

14. profit

a) profess
b) profile
c) profit *
d) prophet

15. hall

a) all
b) owl
c) hall *
d) hale

16. contraste

a) contract
b) contra
c) country
d) contrast *

17. désir

a) deserve
b) decern
c) desire *
d) design

18. drame

a) drain
b) drama *
c) drum
d) dram

19. empire

a) umpire
b) empire *
c) emperor
d) empower

20. énergie

a) economy

b) enemy
c) energy *
d) anarchy

21. excès
a) access
b) except
c) excess *
d) accept

22. bison
a) bosom
b) baize
c) bison *
d) bizen

23. galop
a) gallop *
b) gable
c) galore
d) gallon

24. grain
a) gram
b) grant
c) grain *
d) grey

25. mesure
a) measured
b) measure *
c) masher
d) Matthew

26. signe
a) sign *
b) sigh
c) sane
d) sing

27. erreur
a) array
b) errand
c) error *
d) erase

28. ferveur
a) fervour *
b) fever
c) fervent
d) favor

29. réponse
a) response *
b) respond
c) reproach
d) repose

30. respect
a) respite
b) respect *
c) rasper
d) re-speak

Part II, the Posttest

<u>Directions</u> : You will hear one word in French pronounced twice, followed by four English words. One of the four English words has the same or nearly the same spelling as the French word but a slightly different pronunciation. Listen carefully and try to identify the English word which corresponds to the French word.

Indicate your response by a black mark which completely fills, but does not go outside of, the space between the dotted lines.

Use an HB pencil to mark your response.

Avoid retracing a mark so often that the mark becomes shiny.

Make sure that all erasures are done neatly and completely.

<u>Example A</u>

garage	a) garbage	The French word "garage"
	b) garage	corresponds to the
	c) garbroil	English word "garage".
	d) gangster	b) is the correct answer.

<u>Example B</u>

simple	a) simper	
	b) single	
	c) simple	c) is the correct answer.
	d) simply	

The test now begins.

1. peuple
   a) pearl
   b) purple
   c) people *
   d) pupil

2. grâce
   a) grease
   b) grass
   c) grouse
   d) grace *

3. dîme
   a) deem
   b) dine
   c) dime *
   d) dim

4. disciple
   a) discipline
   b) disciple *
   c) decipher
   d) display

5. pause
   a) pots
   b) pawns
   c) palms
   d) pause *

6. angle
   a) anger
   b) angel
   c) angle *
   d) Angles

7. démon
   a) demos
   b) demon *
   c) demand
   d) demean

8. bandit
   a) bandit *
   b) bunny
   c) bandy
   d) bandage

9. feinte
   a) feint *
   b) fend
   c) fame
   d) fate

10. ligne
   a) lime
   b) lame
   c) ling
   d) line *

11. pot
    a) paw
    b) post
    c) pot *
    d) pay

12. inceste
    a) insert
    b) insist
    c) incest *
    d) insect

13. lampe
    a) lap
    b) lamb
    c) lamp *
    d) land

14. larve
    a) larva *
    b) large
    c) lark
    d) lard

15. charbon
    a) carbine
    b) Sharon
    c) cabin
    d) carbon *

16. destin
    a) destiny *
    b) distance
    c) distant
    d) destine

17. désert
    a) decern
    b) dessert
    c) distant
    d) desert *

18. balcon
    a) Balkan
    b) balcony *
    c) balker
    d) bulky

19. bordure
    a) broaden
    b) boredom
    c) border
    d) bordure *

20. forêt
    a) foray
    b) forest *
    c) fortrell
    d) fortress

21. unité
    a) unity *
    b) unit
    c) unite
    d) unify

22. contrat

    a) country
    b) contra
    c) contract *
    d) contrast

23. harem

    a) harem *
    b) harangue
    c) heron
    d) Aaron

24. objet

    a) abject
    b) objure
    c) object *
    d) obey

25. science

    a) scene
    b) salience
    c) science *
    d) silence

26. aspect

    a) asperse
    b) aspect *
    c) aspen
    d) aspire

27. portrait

    a) porter
    b) portrait *
    c) portray
    d) portress

28. avantage

    a) advantage *
    b) avenge
    c) average
    d) aventail

29. produit

    a) proceed
    b) predict
    c) product *
    d) produce

30. horizon

    a) Horace
    b) arrise
    c) horizon *
    d) arrisen

The * asterik behind the English word indicates the answer.

Written Cognate Recognition Test

Part I, the Pretest

Directions : Choose the letter which represents the best response for each of the following sentences and mark it on the answer sheet by filling the space between the dotted lines.

Use an HB pencil to mark your response.

Avoid retracing a mark so often that the mark becomes shiny.

Make sure that all erasures are done neatly and completely.

Avoid making any type of mark along the right-hand edge of the paper where solid black marks already exist.

Only one response per sentence is permitted.

Please do not write in the test booklet.

1. Il est arrivé au ----- juste.
   a) midi
   b) minute
   c) milieu
   d) moment *

2. Un ----- répare les voitures.
   a) ingénieur
   b) mécanicien *
   c) cordonnier
   d) menuisier

3. Les Canadiens devraient être fiers de ----- .
   a) leur domination
   b) leurs gens
   c) leur nationalité *
   d) leurs peuples

4. On achète des robes dans ----- .
   a) un atelier
   b) une boutique *

c) un bureau
d) une usine

5. Je ne peux pas lui écrire. Je n'ai pas de ----- .
a) feuille
b) papier *
c) page
d) lettre

6. Un artiste travaille dans ----- .
a) un magasin
b) un bureau
c) un atelier *
d) une usine

7. ----- autour d'Edmonton est très fertile.
a) La nationalité
b) la frontière
c) le pays
d) la région *

8. Je lui ai envoyé ----- sans timbres.
a) un papier
b) une page
c) une feuille
d) une lettre *

9. Il ne pouvait pas faire son devoir, il en avait oublié
----- .
a) le papier
b) la feuille
c) la lettre
d) l'explication *

10. Cette dame est professeur. Elle est ----- .
a) jeune
b) petite
c) intelligente *
d) belle

11. Il est irritable. Il sera ----- si tu le déranges.
a) tranquille
b) content
c) calme
d) furieux *

12. Pasteur ----- la pasteurisation.
a) a inventé *
b) a forgé
c) a imité
d) a copié

13. Je suis ----- de trouver la solution.
a) faux

b) sûr *
c) dangereux
d) problématique

14. Gallimard est ----- qui publie Hemingway en France.
a) le journaliste
b) l'imitateur
c) le narrateur
d) l'éditeur *

15. Le dimanche nous allons souvent ----- .
a) à l'école
b) au pays
c) à la forêt *
d) á la région

16. On prépare ----- avec de l'huile, du vinaigre, du poivre et du sel.
a) la salade *
b) les crêpes
c) l'omelette
d) le steak

17. Une voiture sans ----- ne marche pas.
a) porte
b) toit
c) peinture
d) moteur *

18. En Alberta il y a énormément ----- .
a) de carrés
b) de cités
c) de bourgs
d) de villages *

19. Je n'ai pas ----- de lui refuser cette aide.
a) la jalousie
b) le courage *
c) la lâcheté
d) le temps

20. Vous avez arrêté l'auto ----- .
a) moralement
b) comparativement
c) brusquement *
d) généralement

21. Catherine a des traits communs avec Pierre. Elle lui ----- beaucoup.
a) déguise
b) explose
c) ressemble *
d) assemble

22. Le parti québecois clarifie sa position envers ----- .
    a) le pessimisme
    b) l'hypnotisme
    c) l'égotisme
    d) le fédéralisme *

23. Les machines peuvent ----- notre existence.
    a) simplifier *
    b) nullifier
    c) terrifier
    d) purifier

24. ----- est un antonyme de complexe.
    a) Familier
    b) modeste
    c) innocent
    d) simple *

25. La raison est ----- à l'homme.
    a) présidentielle
    b) essentielle *
    c) torrentielle
    d) tangentielle

26. L'adjectif ----- est un antonyme d'offensif.
    a) agressif
    b) définitif
    c) déductif
    d) défensif *

27. Pour bien connaître ----- d'une région il faut la
    survoler à moyenne altitude.
    a) la profondeur
    b) la géologie
    c) la topographie *
    d) la structure

Part II, the Posttest

Directions : Choose the letter which represents the best response for each of the following sentences and mark it on the answer sheet by filling the space between the dotted lines.

Use an HB pencil to mark your response.

Avoid retracing a mark so often that the mark becomes shiny.

Make sure that all erasures are done neatly and completely.

Avoid making any type of mark along the right-hand edge of the paper where solid black marks already exist.

Only one response per sentence is permitted.

Please do not write in the test booklet.

1. La fête de Noel tombe au mois de ----- .
   a) décembre *
   b) juillet
   c) février
   d) avril

2. Le garçon s'est cassé la jambe. Il est ----- .
   a) au restaurant
   b) à l'école
   c) à l'hôpital *
   d) à l'église

3. Cette femme ----- parce qu'elle est bien heureuse.
   a) court
   b) pleure
   c) danse *
   d) change

4. Un médecin travaille dans ----- .
   a) une boutique
   b) une usine
   c) un bureau *
   d) un atelier

5. Le garçon a apporté le plat quand ils étaient ----- .
   a) à l'hôpital
   b) à l'école
   c) au restaurant *
   d) à l'église

6. Ne trouves-tu pas que ton amie est vaniteuse ?
   Non, je la trouve ----- .
   a) laide
   b) sincère
   c) jolie
   d) modeste *

7. Tu sais qu'on appelle la sixième ----- de Beethoven
   la "Pastorale" n'est-ce pas?
   a) symphonie *
   b) performance
   c) musique
   d) concert

8. ----- ramasse les billets dans le train.
   a) Le conducteur *
   b) la vendeuse
   c) le machiniste
   d) le porteur

9. Les fenêtres de la chapelle ----- des histoires de
   la Bible.
   a) représentent *
   b) assistent
   c) admirent
   d) attendent

10. A la ferme on conduit ----- .
    a) un autobus
    b) un métro
    c) un bateau
    d) un tracteur *

11. ----- est un spectacle magnifique. On y voit des
    clowns, des acrobates et des musiciens.
    a) L'amphithéâtre
    b) le cercle
    c) l'arène
    d) le cirque *

12. Pour faire ----- il faut aller dans la forêt.
    a) un dîner
    b) un abri
    c) un banquet
    d) un pique-nique *

13. ----- je ne regardais pas où je marchais. Et alors,
    je suis tombé.

a) Religieusement
b) naturellement *
c) extrêmement
d) admirablement

14. L'autobus n'arrive pas. Cette heure d'attente m'a paru
----- .
a) une éternité *
b) un temps
c) une antiquité
d) une ironie

15. Que pensez-vous de la peinture ----- ?
a) abstruse
b) courtoise
c) théorique
d) abstraite *

16. Il parle avec trop ----- .
a) de régence
b) de tangence
c) de transparence
d) d'insistance *

17. Elles ont travaillé et gagné le prix. Elles le ----- .
a) méritent *
b) accusent
c) confirment
d) augmentent

18. ----- court les 100 mètres en un temps record.
a) L'homme
b) le champignon
c) le sportsman
d) le champion *

19. ----- multiplie les revenus d'un pays.
a) Le tourisme *
b) le matérialisme
c) le journalisme
d) l' humanisme

20. ----- a étudié la science des remèdes et des
médicaments.
a) Le magicien
b) le technicien
c) le métaphysicien
d) le pharmacien *

21. Les habitudes, les moeurs, et les coutumes ont
nécessairement ----- les types humains.
a) modifié *
b) laissé
c) déposé

d) condensé

22. Je le connais, mais je n'arrive pas à ----- .
    a) l'identifier *
    b) le certifier
    c) l'intensifier
    d) l'unifier

23. Le genre comique et le genre tragique sont les limites
    réelles de la composition ----- .
    a) légère
    b) idyllique
    c) lyrique
    d) dramatique *

24. En France, les admirations sont toujours ----- .
    a) décoratives
    b) érosives
    c) excessives *
    d) duplicatives

25. Les citoyens ----- sont ceux qui s'intéressent aux
    affaires publiques.
    a) ambitieux
    b) malhonnêtes
    c) consciencieux *
    d) indélicats

26. L'énergie ----- est celle d'un corps capable de
    fournir un travail.
    a) différentielle
    b) potentielle *
    c) insubstantielle
    d) essentielle

27. Le dictateur s'est mis à rire quand on lui a -----
    la mort du chef de l'opposition.
    a) déterminé
    b) qualifié
    c) annoncé *
    d) exposé

The investigator, judging the Quick-Scoring Vocabulary Test appropriate for use in this study, ordered 100 copies of this test on March 7, 1975 from the Ontario College of Education. The reply from the Guidance Centre, Faculty of Education, University of Toronto on April 3, 1975 was that the required test was out of print and no longer available. Since the QSVT was standardized, and suited the purposes in this study, the investigator duplicated 85 copies. The QSVT in full, including the scoring key, follows.

The Dominion Tests

Quick-Scoring Vocabulary Test

Grades 9 to 13

Copyright Canada 1958

Department of Educational Research,

Ontario College of Education,

371 Bloor Street West, Toronto 5, Ontario

Directions: Each of the capitalized words in the test have five other words beneath it. Find the other word which means the same or nearly the same as the capitalized word. Then make a heavy black mark completely filling the space between the dotted lines under it. Erase completely any answer you may wish to change.

Sample A

LARGE
green
round
big
hard

The word "big" means the same as the word "LARGE" so the dotted space under "big" has been blackened.

good

Sample B
    ERROR
    arrow
    blade
    string
    quarrel
    mistake

The word "mistake" means about the same as the word "ERROR" so the dotted space under "mistake" has been blackened.

Try to answer all the items in the test. Work as rapidly as possible. Be sure to mark only one word in each item. If a question is too difficult, skip it and come back to it later if you have time. You will have exactly 20 minutes for the test. If you finish ahead of time, check over your work. Be sure to do front and back of the test.

QSVT, Form A

1 TALENT	2 BEWILDER	3 CRAVE	4 SYNOPSIS
ability	forsake	fear	bonus
courage	annoy	avoid	preface
tact	confuse	deserve	vacation
tolerance	condemn	receive	summary
faith	surprise	desire	system

5 PURSUE	6 REQUIRE	7 LOATHE	8 PROCURE
release	reward	tease	create
punish	ask	desire	obtain
identify	retain	borrow	refuse
buy	need	frighten	need
follow	report	detest	demand

9 JUBILANT	10 SAUNTER	11 CATASTROPHE	12 CONTROVERSY
playful	whistle	astonishment	dispute
joyful	follow	prophecy	certainty
noisy	stumble	festival	bargain
doubtful	doubt	excellence	denial
pleasant	stroll	calamity	enmity

13 TITANIC	14 LAMENT	15 INTERROGATE	16 CONSPIRE
divine	mourn	recall	plot
artistic	forget	threaten	request
bitter	cherish	question	forsee
gigantic	impose	interrupt	regret
ancient	commend	contradict	conclude

17 TRIVIAL	18 ENDEAVOUR	19 COMPETENT	20 ANXIETY
tiresome	risk	aggressive	agony

absurd	strive	capable	peace
unusual	discourage	vigorous	trust
frequent	hope	saucy	grief
unimportant	beseech	prejudiced	worry

21 SERENE	22 VENOM	23 AUTHENTIC	24 NAUSEATE
joyous	skill	genuine	pledge
certain	vision	valuable	overpower
tired	trust	lawful	increase
calm	poison	doleful	deafen
cross	adoration	thoughtful	sicken

25 THRIVE	26 ACCENTUATE	27 HAUGHTY	28 BESEECH
restrain	prolong	friendly	inquire
struggle	implore	quarrelsome	implore
flourish	emphasize	mighty	warn
endeavour	conceal	difficult	command
increase	signify	proud	obtain

29 FUTILE	30 HAMLET	31 RETARD	32 ARROGANT
puzzling	stream	refuse	polite
angry	village	delay	deceitful
plentiful	cottage	declare	proud
delicate	valley	resume	clever
useless	song	prevent	sorrowful

33 FONDLE	34 VIGILANT	35 INDOMITABLE	36 ELUDE
desire	reliable	unyielding	refer
dawdle	suspicious	selfish	hide
pet	restless	impossible	evade
cheat	watchful	doubtful	deceive
confuse	vengeful	needless	lead

37 ABYSS	38 STATURE	39 SOMBRE	40 AROMATIC
despair	monument	soothing	religious
chasm	height	sleepy	ancient
ignorance	law	gloomy	thoughtful
obedience	design	baffled	fragrant
omission	statement	abusive	loving

41 ABHOR	42 DEXTERITY	43 RAVENOUS	44 AWE
detest	timidity	furious	love
avoid	speed	hungry	fear
forbid	dullness	black	hope
dread	skill	uncouth	agony
regret	success	dismal	anger

45 AVERT	46 ABRIDGE	47 CHIDE	48 SUBTLE
delay	describe	flatter	honest
explain	refuse	scold	sharp
deny	admit	cherish	harmful
persuade	shorten	deceive	successful
prevent	advance	distrust	crafty

49 AMALGAMATE	50 CHURLISH	51 IRATE	52 IMMERSE
revise	valuable	proud	mingle
abolish	doubtful	kind	dip
condense	angry	proper	arise
congeal	rude	angry	disappear
unite	pleasant	unpopular	imply

53 NOCTURNAL	54 TARDY	55 ANGUISH	56 BUXOM
nightly	sticky	terror	plump
sluggish	robust	bravery	thrifty
satanic	late	pain	rough
regular	impolite	poverty	quarrelsome
dangerous	postponed	rage	blunt

57 PILFER	58 ASSENT	59 THWART	60 COMELY
disturb	trust	support	handsome
steal	dispatch	taunt	humble
discover	deny	describe	comical
prefer	climb	frustrate	sedate
lie	agree	complete	nimble

61 DEMURE	62 PALTRY	63 FURTIVE	64 CHAGRIN
unripe	sacred	solemn	defeat
abject	scarce	sluggish	disappointment
sad	worthless	saucy	violence
lonely	huge	stealthy	humour
modest	saucy	kindly	merriment

65 ERADICATE	66 ARDUOUS	67 CHASTISE	68 CANDID
repress	laborious	punish	sweet
suggest	careless	pursue	sly
destroy	eager	blame	lucky
enthuse	quarrelsome	polish	evasive
conquer	affectionate	purify	frank

69 ADVOCATE	70 CASCADE	71 INSIPID	72 GARISH
command	shower	sarcastic	spotless
foretell	chasm	tasteless	fickle
recommend	ravine	poisonous	gaudy
regret	waterfall	inspiring	boastful
oppose	mountain	decisive	careless

73 AUGMENT	74 CAUSTIC	75 PORTLY	76 PROGENY
argue	cautious	polite	genius
plead	extravagant	grand	offspring
agree	sarcastic	boisterous	instruction
increase	expensive	wealthy	progress
tease	suspicious	stout	prediction

77 ADAGE	78 SUAVE	79 BUFFOON	80 SCRUPULOUS
prayer	haughty	clown	unprincipled
surplus	polite	soldier	distrustful
advice	brave	monkey	miserly
proverb	sinful	bluffer	persistent

rebuke   speedy   storm   conscientious

81 SUCCOUR	82 MOLLIFY	83 REPROBATE	84 MOROSE
taunt	enrage	refund	surly
revive	coddle	sinner	suspicious
aid	destroy	lawyer	studious
cheat	entertain	reproduction	optimistic
succeed	appease	proof	stupid

85 VENTURE	86 FELICITY	CONSTERNATION	88 FRUGAL
pierce	happiness	confusion	useless
explore	ease	indignation	frank
succeed	dexterity	dismay	nourishing
conquer	speed	revelry	economical
risk	delicacy	impatience	dainty

89 PHLEGMATIC	90 PURLOIN
sluggish	borrow
scholarly	hide
delicate	copy
frivolous	steal
excitable	deceive

QSVT, Form B

1 HAZARDOUS
difficult
plentiful
dangerous
fearful
fortunate

2 RADIANT
scornful
burning
impulsive
spotless
shining

3 ACCUMULATE
bestow
spread
assign
collect
desire

4 PENETRATE
pierce
pursue
imprison
conclude
consider

5 MIMIC
imitate
taunt
shorten
blame
entertain

6 FRIGID
angry
silent
friendly
cold
frightened

7 DISPATCH
send
delay
visit
invite
return

8 INGENIOUS
clever
young
gentle
honest
frank

9 RELUCTANT
unwilling
inactive
rebellious
hopeless
clumsy

10 IGNITE
insult
absorb
swindle
break
kindle

11 MEEK
sad
humble
sickly
wit
bold

12 BARBAROUS
bearded
gorgeous
savage
pointed
drunken

13 COLOSSAL
clumsy
false
profitable
cylindrical
huge

14 IMPERTINENT
unsuitable
unskilful
quarrelsome
appropriate
saucy

15 PARLEY
danger
postponement
contract
conference
disagreement

16 DISPERSE
detest
scatter
provoke
exhaust
surprise

17 STAMINA
endurance
infirmity
impudence
conceit
frailty

18 INSOLENT
foolish
sleepy
rude
untruthful
lazy

19 TRANQUIL
lovely
easy
sad
brief
calm

20 ENTICE
dissuade
enthrall
tempt
offer
squeeze

21 GAUNT
thin
lovely
brave
rude
unhappy

22 CONSOLE
comfort
persuade
compose
prevent
convince

23 WRITHE
tease
injure
shout
split
squirm

24 RESOLVE
desire
clarify
hesitate
determine
decline

25 SEVER
scold
remind
twist
serve
cut

26 AGILE
nimble
slender
clever
loyal
cautious

27 WARY
tired
angry
cautious
troubled
hardy

28 CALAMITY
discontent
astonishment
celebration
noise
disaster

29 CHAOS
success
charm

30 AMICABLE
friendly
jubilant

31 RESIDUE
dwelling
remainder

32 EQUITY
peace
fairness

confusion
cavern
universe

unpopular
hostile
profitable

portion
outcome
original

truth
gentleness
finality

33 JEOPARDY
danger
certainty
sorrow
absurdity
doubt

34 LENIENT
reliable
mild
vulgar
loyal
slender

35 MAIM
accuse
rescue
whip
expel
cripple

36 EXCERPT
example
proof
extract
description
digest

37 IMPEDE
pursue
weaken
suggest
renew
hinder

38 ADEPT
elderly
serious
skilful
critical
flighty

39 ADVERSARY
misfortune
opponent
counsellor
superior
gossip

40 KNAVE
fairy
knight
rogue
knack
arch

41 ARID
hard
dry
hot
sour
bitter

42 PLACID
lonely
solid
calm
cautious
sublime

43 TEPID
lukewarm
shy
cross
concise
dull

44 BELLIGERENT
courageous
musical
warlike
generous
beautiful

45 SLOVENLY
slow
untidy
stubborn
silly
impudent

46 ORDINANCE
law
tidiness
occurrence
routine
ceremony

47 EJECT
expel
refuse
deny
depart
exclaim

48 DORMANT
sober
silent
humble
sad
inactive

49 AMITY
justice
humour
similarity
friendship
happiness

50 DEFER
prevent
respect
postpone
suggest
agree

51 QUELL
enquire
subdue
instil
puzzle
satisfy

52 VANQUISH
disappear
defeat
follow
hide
betray

53 DILIGENT
ambitious
stupid
punctual
industrious
skilful

54 CRONE
lullaby
crutch
complaint
hag
companion

55 DEPLORE
suspect
spread
agree
applaud
regret

56 WILY
naughty
crafty
sinewy
untamed
weird

57 BRUSQUE
ugly
brave
brutal
curt
patient

58 OBNOXIOUS
obliging
stinking
hasty
offensive
jolly

59 EXULT
praise
rejoice
shout
declare
expel

60 VERDANT
humid
green
contrary
apparent
truthful

61 SPRITE

62 DEFT

63 MENACE

64 DECREPIT

mast	bold	warning	cranky
sprig	crazy	expense	feeble
temper	clumsy	threat	critical
child	skilful	nuisance	deceitful
fairy	exact	result	bankrupt

65 SUSTENANCE
strength
excitement
nourishment
opportunity
suspicion

66 LIBEL
risk
offence
ill-will
slander
praise

67 OMINOUS
constant
threatening
religious
hollow
loud

68 REVOKE
annoy
detract
disclose
repeal
hinder

69 EXTOL
praise
excite
spend
charge
prolong

70 CHERUB
singer
fairy
angel
imp
canary

71 BERATE
scold
value
hinder
discount
hasten

72 CONCUR
appeal
advise
protest
resent
agree

73 DIVULGE
disgust
enlarge
disclose
repress
devour

74 SWARTHY
gruff
gracious
strong
dark
dishonest

75 BLITHE
swift
sly
angry
gay
false

76 AVARICE
hatred
greed
cruelty
guilt
hope

77 DOCILE
stubborn
pleasant
supple
submissive
devoted

78 FETID
tired
dangerous
stinking
hungry
satisfied

79 INDOLENT
miserly
saucy
stubborn
careless
lazy

80 ABET
assist
wager
doubt
deny
send

81 ARCHAIC
sacred
stubborn
monumental
antiquated
unfamiliar

82 INTER
assume
agree
debate
doubt
bury

83 INSTIGATE
establish
irritate
announce
criticize
incite

84 UNGAINLY
stupid
profitless
clumsy
retarded
worthless

85 DEJECTED
scorned
stupid
excluded
sad
returned

86 BAUBLE
treasure
blunder
chatter
trinket
bungle

87 APPEASE
praise
placate
entice
insult
delight

88 RESILIENT
tough
determined
reserved
hostile
elastic

89 RESPITE
annoyance
fatigue
delay
requirement
suspicion

90 ADMONISH
destroy
challenge
revise
warn
restore

Answer Keys

Item	Form A	Form B
1.	ability	dangerous
2.	confuse	shining
3.	desire	collect
4.	summary	pierce
5.	follow	imitate
6.	need	cold
7.	detest	send
8.	obtain	clever
9.	joyful	unwilling
10.	stroll	kindle
11.	calamity	humble
12.	dispute	savage
13.	gigantic	huge
14.	mourn	saucy
15.	question	conference
16.	plot	scatter
17.	unimportant	endurance
18.	strive	rude
19.	capable	calm
20.	worry	tempt
21.	calm	thin
22.	poison	comfort
23.	genuine	squirm
24.	sicken	determine
25.	flourish	cut
26.	emphasize	nimble
27.	proud	cautious
28.	implore	disaster
29.	useless	confusion
30.	village	friendly

Item	Form A	Form B
31.	delay	remainder
32.	proud	fairness
33.	pet	danger
34.	watchful	mild
35.	unyielding	cripple
36.	evade	extract
37.	chasm	hinder
38.	height	skilful
39.	gloomy	opponent
40.	fragrant	rogue
41.	detest	dry
42.	skill	calm
43.	hungry	lukewarm
44.	fear	warlike
45.	prevent	untidy
46.	shorten	law
47.	scold	expel
48.	crafty	inactive
49.	unite	friendship
50.	rude	postpone
51.	angry	subdue
52.	dip	defeat
53.	nightly	industrious
54.	late	hag
55.	pain	regret
56.	plumb	crafty
57.	steal	curt
58.	agree	offensive
59.	frustrate	rejoice
60.	handsome	green

Item	Form A	Form B
61.	modest	fairy
62.	worthless	skilful
63.	stealthy	threat
64.	disappointment	feeble
65.	destroy	nourishment
66.	laborious	slander
67.	punish	threatening
68.	frank	repeal
69.	recommend	praise
70.	waterfall	angel
71.	tasteless	scold
72.	gaudy	agree
73.	increase	disclose
74.	sarcastic	dark
75.	stout	gay
76.	offspring	greed
77.	proverb	submissive
78.	polite	stinking
79.	clown	lazy
80.	conscientious	assist
81.	aid	antiquated
82.	appease	bury
83.	sinner	incite
84.	surly	clumsy
85.	risk	sad
86.	happiness	trinket
87.	dismay	placate
88.	economical	elastic
89.	sluggish	delay
90.	steal	warn

Appendix C

Table A

Item Analysis of the OCRT Test, Part I

Item Number	Difficulty	Biserial Correlation	Item Reliability Index
1	0.40	0.36	0.14
2	0.36	0.62	0.23
3	0.68	0.39	0.14
4	0.90	0.62	0.12
5	0.22	0.67	0.20
6	0.44	0.53	0.21
7	0.90	0.61	0.11
8	0.47	0.61	0.24
9	0.69	0.51	0.18
10	0.97	0.22	0.01
11	0.86	0.48	0.11
12	0.24	0.08	0.03
13	0.55	0.19	0.08
14	0.62	0.18	0.07
15	0.45	0.22	0.09
16	0.91	0.18	0.03
17	0.97	0.22	0.01
18	0.26	0.44	0.14
19	0.69	0.43	0.15
20	0.74	0.55	0.18
21	0.24	0.51	0.16
22	0.54	0.21	0.09
23	0.33	0.24	0.09
24	0.33	0.47	0.17
25	0.76	0.31	0.10
26	0.54	0.65	0.26
27	0.91	0.51	0.08
28	0.39	0.75	0.29
29	0.76	0.36	0.11
30	0.85	0.32	0.08

Appendix C

Table B

Item Analysis of the WCRT Test, Part I

Item Number	Difficulty	Biserial Correlation	Item Reliability Index
1	0.39	0.34	0.13
2	0.96	0.76	0.06
3	0.68	0.14	0.05
4	0.94	0.70	0.09
5	0.90	0.79	0.14
6	0.64	0.20	0.08
7	0.81	0.45	0.12
8	0.25	0.48	0.15
9	0.65	0.25	0.09
10	0.98	1.12	0.07
11	0.83	0.66	0.17
12	0.94	0.73	0.09
13	0.28	0.41	0.14
14	0.68	0.41	0.15
15	0.33	0.41	0.15
16	0.96	0.63	0.05
17	0.88	0.70	0.14
18	0.26	0.44	0.14
19	0.49	0.37	0.15
20	0.63	0.61	0.23
21	0.85	0.81	0.19
22	0.88	0.06	0.01
23	0.83	0.47	0.12
24	0.84	0.75	0.18
25	0.83	0.30	0.08
26	0.88	0.73	0.15
27	0.73	0.73	0.24

Appendix D

Table C

Summary of the One Way Analysis of Covariance
The QSVT Posttest with the QSVT Pretest
as Covariate

Comparison of the Unadjusted and Adjusted Means and
Variances of Group A, B, and C

| | Unadjusted | | Adjusted | |
	Mean	Variances	Mean	Variances
Group A	52.58	213.73	1.39	18.91
Group B	58.40	223.75	1.66	23.33
Group C	50.72	281.21	2.35	25.86

Homogeneity of within group variances x^2 = 0.51 p = 0.77
Homogeneity of within cell regression coeff. test x^2 = 0.55
p = 0.76

Analysis of Covariance

Source	SS	DF	MS	F-Ratio	Probability
Effects	11.74	2	5.87	0.26	0.77
Cov 1	15,478.45	1	15,478.45	695.66	0.00
Errors	1557.50	70	22.25		

Scheffé Multiple Comparisons of Means

Groups Compared	F-Value	p Value
Group A vs Group B	0.02	0.98
Group A vs Group C	0.25	0.78
Group B vs Group C	0.12	0.88

Appendix E

Student Questionnaire to Evaluate the Oral Cognate

Teaching Material

I would like to know your reaction to and obtain your evaluation of the teaching material on cognates. Your honest answers could help me 1) to assess if the use of cognates is worth teaching or not, and 2) to improve, alter or delete what you did not like.

1) In what ways do you think that the use of cognates could aid your French study?

2) Did you learn any English-French cognate words of which you did not know the meaning in English?

yes ----- no -----

If you answered "yes", please indicate about how many .

----

3) What did you like or dislike in the teaching material of cognates?

a) The twenty-four cognate word-ending regularities, like "the French "-té" corresponds to the English "-ty", etc.

liked ----- disliked ----- why?

b) The study of the French vowels.

disliked ----- liked ----- why?

c) The ten example words followed by a short definition in French for sixteen cognate word-ending regularities.

liked ----- disliked ----- why?

d) The 20 French words for which you were asked to guess the English equivalent?

liked ----- disliked ----- why?

4) Have you tried to apply your knowledge about cognates to

a) listening to the French radio station yes --- no --

b) the French television   yes ----- no -----

c) or French tapes   yes ----- no -----

5) In your opinion, how long should the study of cognates last?

Please specify the number of lessons -----

6) Was six lessons distributed over six weeks a) too long or b) too short?

a) too long -----

b) too short -----

Explain why?

7) Do you think that cognates would be

a) helpful only in oral comprehension?   yes --- no --

b) helpful only in written comprehension? yes --- no --

c) helpful in both oral and written comprehension?

                                          yes --- no --

d) helpful in neither oral or written comprehension?

                                          yes --- no --

8) Having had practice with identifying oral cognates would you like to learn how to understand written cognates as well ?

yes ----- no ----- why?

Student Questionnaire to Evaluate the Written Cognate

Teaching Material

I would like to know your reaction to and obtain your evaluation of the teaching material on cognates. Your honest answers could help me 1) to assess if the use of cognates is worth teaching or not, and 2) to improve, alter or delete what you did not like.

1) In what ways do you think that the use of cognates could aid your French study?

2) Did you learn any English-French cognate words of which you did not know the meaning in English?

yes ----- no -----

If you answered "yes", please indicate about how many .

----

3) What did you like or dislike in the teaching material of cognates?

a) The twenty-four cognate word-ending regularities, like "the French "-té" corresponds to the English "-ty", etc.

liked ----- disliked ----- why?

b) The French noun, verb, adjective and adverb characteristics?

liked ----- disliked ----- why?

c) The ten example words followed by a short definition in French for sixteen word-ending regularities.

liked ----- disliked ----- why?

d) The meaning of suffixes like "-phone, -phile, -scope",
etc.

liked ----- disliked ----- why ?

4) Rate the following French excerpts on how well you
understood them by checking one category:

La Renaissance italienne   Easy -- Normal -- Difficult

La Pollution   Easy -- Normal -- Difficult

L'Empire Inca   Easy -- Normal -- Difficult

Les Dinosaures   Easy -- Normal -- Difficult

L'Avenir de l'Amérique centrale

                                Easy -- Normal -- Difficult

5) Which of the excerpts did you find a) most interesting
and which one the b) least interesting?

a) ------

b) ------

6) Have you tried to apply your knowledge of cognates to

a) reading a French newspaper   yes --- no ---

b) a French magazine   yes --- no ---

c) a French book   yes --- no ---

7) In your opinion, how long should the study of cognates
last?

Please specify the number of lessons ------

8) Was six lessons distributed over six weeks a) too long
or b) too short ?

a) too long -----

b) too short ------

Explain why?

9) Do you think that cognates would be

a) helpful only in oral comprehension?   yes --- no --

b) helpful only in written comprehension? yes --- no --

c) helpful in both oral and written comprehension?

yes --- no --

d) helpful in neither oral or written comprehension?

yes --- no --

10) Having had practice with identifying written cognates would you like to learn how to understand oral cognates as well?

yes ----- no ----- why?

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